

LLNL Livermore Site First Quarter 2013 Self-Monitoring Report

This quarterly report presents the first quarter 2013 self-monitoring data for the ground water and soil vapor treatment facilities at the Lawrence Livermore National Laboratory (LLNL) Livermore Site. The volumes of ground water and soil vapor treated, and volatile organic compound (VOC) mass removed during the first quarter of 2013 are presented in Tables 1 and 2, respectively. An historical summary of VOC volume and mass removed are presented in Tables 3 and 4, respectively.

Attachment A presents results of ground water treatment facility and extraction well (ground water and soil vapor) VOC, chromium, bioassay, turbidity, and chloride analyses (Tables A-1 through A-5). Metals and radiological analyses are presented in Tables A-6 and A-7, respectively. During the first quarter of 2013, all effluent sample analytical results were within acceptable discharge limits.

Self-monitoring reports for all treatment facilities are presented in Attachment B. Monthly volumes of ground water extracted are shown in Attachment B; however, instantaneous flow rates are not shown for wells that are now only used for sampling and are not continuously pumped. The monthly volume shown for these wells is the quantity of water evacuated for sampling purposes.

A map showing Livermore Site treatment areas and treatment facility locations, and ground water elevation contour maps showing hydraulic capture zones for hydrostratigraphic units (HSUs) 1B, 2, 3A, 3B, 4, and 5, are presented in Attachment C. The contour maps for the individual HSUs are based on data collected during the first quarter of 2013.

Table 1. Volumes of ground water and soil vapor extracted and treated at the Livermore Site, January through March 2013.

Treatment Area^a	Month	Volume of ground water extracted (Kgal)^b	Volume of vapor extracted (Kcf)^b
TFA	January	11,423	-
	February	8,589	-
	March	8,412	-
TFB	January	3,022	-
	February	2,470	-
	March	2,445	-
TFC	January	3,519	-
	February	3,291	-
	March	3,271	-
TFD	January	6,611	2,633
	February	6,326	2,206
	March	6,244	2,071
TFE	January	2,077	2,046
	February	2,175	1,741
	March	2,358	1,835
TFG	January	533	-
	February	444	-
	March	456	-
TFH	January	799	1,699
	February	622	1,472
	March	630	1,619
TOTAL^c		75,717	17,322

^a Totals include ground water and soil vapor extracted from the following facilities:

TFA area: TFA, TFA-E

TFB area: TFB

TFC area: TFC, TFC-E, TFC-SE

TFD area: TFD, TFD-E, TFD-HPD, TFD-S, TFD-SE, TFD-SS, TFD-W, VTFD-ETCS, VTFD-HS

TFE area: TFE-E, TFE-HS, TFE-NW, TFE-SE, TFE-SW, TFE-W, VTFE-ELM, VTFE-HS

TFG area: TFG-1, TFG-N

TFH area: TF406, TF406-NW, TF518-N, TF518-PZ, TF5475-1, TF5475-2, TF5475-3, VTF406-HS, VTF511, VTF518-PZ, VTF5475

TFF started operation in February 1993 for fuel hydrocarbon remediation. In August 1995, the regulatory agencies agreed that the vadose zone remediation was complete, and in October 1996 a No Further Action status was granted for the ground water.

^b Totals are derived from individual extraction wells shown in Attachment B.

^c Rounded number.

Kcf = Thousands of cubic feet.

Kgal = Thousands of gallons.

Table 2. VOC mass removed at the Livermore Site, January through March 2013.

Treatment Area^a	VOC mass removed from ground water (kg)	VOC mass removed from soil vapor (kg)	Total VOC mass removed (kg)^b
TFA	1.1	-	1.1
TFB	0.6	-	0.6
TFC	1.2	-	1.2
TFD	6.5	1.3	7.8
TFE	2.1	1.2	3.3
TFG	0.1	-	0.1
TFH	0.4	4.3	4.7
TOTAL^b	12.0	6.8	18.8

Table 3. Historical summary of volumes of water and soil vapor removed at the Livermore Site through March 2013.

Treatment Area^a	Volume of ground water extracted (Mgal)	Volume of vapor extracted (Mcf)
TFA	1,987	-
TFB	472	-
TFC	533	-
TFD	1,096	114
TFE	394	182
TFG	88	-
TFH	174	260
TOTAL^b	4,744	556

Table 4. Historical summary of VOC mass removed from water and soil vapor at the Livermore Site through March 2013.

Treatment Area^a	VOC mass removed from ground water (kg)	VOC mass removed from soil vapor (kg)	Total VOC mass removed (kg)^b
TFA	212	-	212
TFB	82	-	82
TFC	109	-	109
TFD	870	97	967
TFE	227	154	381
TFG	12	-	12
TFH	41	1,261	1,302
TOTAL^b	1,553	1,512	3,065

^a Refer to Table 1 footnote for facilities in each treatment facility area.^b Rounded number.

Abbreviations for Tables 2, 3 and 4:

kg = Kilograms.

Mcf = Millions of cubic feet.

Mgal = Millions of gallons.

VOC = Volatile organic compound.

Attachment A

VOC, Chromium, Bioassay,

Turbidity, Chloride, Metals, and

Radiological Analyses

Table A-1. VOC analyses of influent and effluent samples by treatment facility.

Sample Station	Date Sampled	Analytic Method	CTET <-	CFORM -	1,1-DCA -	1,2-DCA -	1,1-DCE ug/L (ppb)	1,2-DCE -	Freon 113 -	PCE -	1,1,1-TCA -	TCE -	Freon 11 ->
TFA													
TFA-I001	03-JAN-13	E601	<0.5	0.9	0.79	<0.5	1.2	<1	<0.5	6.6	<0.5	0.64	<0.5
TFA-I001	04-FEB-13	E601	<0.5	0.91	0.71	<0.5	1	<1	<0.5	6.3	<0.5	0.52	<0.5
TFA-I001	01-MAR-13	E601	<0.5	0.83	0.68	<0.5	1.1	<1	<0.5	6	<0.5	0.62	<0.5
TFA-E001	03-JAN-13	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFA-E001	04-FEB-13	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFA-E001	01-MAR-13	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFA-E^a													
W-254	15-FEB-13	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	31	<0.5	0.8	<0.5
TFB													
TFB-I002	03-JAN-13	E601	0.62	2.6	<0.5	<0.5	1.5	<1	3.8	1.5	<0.5	15	<0.5
TFB-I002	04-FEB-13	E601	0.62	2.7	<0.5	<0.5	1.5	<1	3.8	1.5	<0.5	15	<0.5
TFB-I002	04-MAR-13	E601	0.62	2.5	<0.5	<0.5	1.4	<1	3.3	1.3	<0.5	13	<0.5
TFB-E002	03-JAN-13	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFB-E002	04-FEB-13	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFB-E002	04-MAR-13	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFC													
TFC-I003	07-JAN-13	E601	<0.5	1	<0.5	<0.5	0.66	<1	10	3.5	<0.5	11	<0.5
TFC-I003	04-FEB-13	E601	<0.5	0.98	<0.5	<0.5	0.64	<1	8.6	3.2	<0.5	10	<0.5
TFC-I003	04-MAR-13	E601	<0.5	0.99	<0.5	<0.5	0.65	<1	9.2	3.3	<0.5	10	<0.5
TFC-E003	07-JAN-13	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFC-E003	04-FEB-13	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFC-E003	04-MAR-13	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFC-E													
MTU1-I	22-JAN-13	E601	<0.5	11	<0.5	<0.5	0.65	<1	12	0.61	<0.5	7	2.9
MTU1-I	01-FEB-13	E601	<0.5	14	<0.5	<0.5	1	<1	15	0.78	<0.5	9.6	5.1
MTU1-I	07-MAR-13	E601	<0.5	9.9	<0.5	<0.5	0.62	<1	10	<0.5	<0.5	6	2.5
MTU1-E	22-JAN-13	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
MTU1-E	01-FEB-13	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
MTU1-E	07-MAR-13	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5

Table A-1. VOC analyses of influent and effluent samples by treatment facility.

Sample Station	Date Sampled	Analytic Method	CTET <-	CFORM -	1,1-DCA -	1,2-DCA -	1,1-DCE ug/L (ppb)	1,2-DCE -	Freon 113 -	PCE -	1,1,1-TCA -	TCE -	Freon 11 ->
TFC-SE													
PTU1-I	07-JAN-13	E601	<0.5	7.2	<0.5	<0.5	1.9	<1	17	0.69	<0.5	15	0.99
PTU1-I	01-FEB-13	E601	<0.5	8.1	<0.5	<0.5	1.9	<1	15	0.62	<0.5	15	1.1
PTU1-I	04-MAR-13	E601	<0.5	7	<0.5	<0.5	1.7	<1	14	0.65	<0.5	14	0.93
PTU1-E	07-JAN-13	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU1-E	01-FEB-13	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU1-E	04-MAR-13	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFD													
TFD-I004	02-JAN-13	E601	4.5	3	<0.5	<0.5	0.85	<1	0.93	1.6	<0.5	170	13
TFD-I004	04-FEB-13	E601	2	3.2	<0.5	<0.5	1	<1	0.67	1.8	<0.5	54	16
TFD-I004	01-MAR-13	E601	2	2.9	<0.5	<0.5	1	<1	0.61	1.8	<0.5	51	15
TFD-E004	02-JAN-13	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFD-E004	04-FEB-13	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFD-E004	01-MAR-13	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFD-E													
PTU8-I	03-JAN-13	E601	2.1	0.9	<0.5	<0.5	1.3	<1	<0.5	2	<0.5	55	0.54
PTU8-I	04-FEB-13	E601	3.7	1.6	<0.5	1.2	5	<1	<0.5	4.8	<0.5	96	0.84
PTU8-I	05-MAR-13	E601	2.4	1	<0.5	0.88	5.3	<1	<0.5	4.3	<0.5	67	0.51
PTU8-E	03-JAN-13	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU8-E	04-FEB-13	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU8-E	05-MAR-13	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFD-HPD													
PTU10-I	10-JAN-13	E601	1.2	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	31	<0.5
PTU10-I	12-FEB-13	E601	1.3	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	31	<0.5
PTU10-I	06-MAR-13	E601	1.3	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	30	<0.5
PTU10-E	10-JAN-13	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU10-E	12-FEB-13	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU10-E	06-MAR-13	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFD-S													
PTU2-I	03-JAN-13	E601	0.72	1.5	<0.5	<0.5	4	<1	1.4	6.4	<0.5	48	<0.5
PTU2-I	07-FEB-13	E601	0.68	1.6	<0.5	<0.5	3.9	<1	1.2	5.1	<0.5	42	<0.5
PTU2-I	11-MAR-13	E601	0.73	1.6	<0.5	<0.5	3.8	<1	1.1	5.4	<0.5	45	<0.5

Table A-1. VOC analyses of influent and effluent samples by treatment facility.

Sample Station	Date Sampled	Analytic Method	CTET <-	CFORM -	1,1-DCA -	1,2-DCA -	1,1-DCE ug/L (ppb)	1,2-DCE -	Freon 113 -	PCE -	1,1,1-TCA -	TCE -	Freon 11 ->
TFD-S (cont.)													
PTU2-E	03-JAN-13	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU2-E	07-FEB-13	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU2-E	11-MAR-13	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFD-SE													
PTU11-I	03-JAN-13	E601	0.75	3.8	0.7	1.5	11	<1	1.3	34	<0.5	100	<0.5
PTU11-I	04-FEB-13	E601	0.67	4.7	0.69	1.3	9.4	<1	1.7	28	<0.5	100	<0.5
PTU11-I	05-MAR-13	E601	0.63	3.9	0.57	1.1	8.3	<1	1.5	27	<0.5	93	<0.5
PTU11-E	03-JAN-13	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU11-E	04-FEB-13	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU11-E	05-MAR-13	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFD-SS													
PTU12-I	03-JAN-13	E601	1.8	2.7	0.63	2.1	10	<1	0.79	22	<0.5	120	6.2
PTU12-I	08-FEB-13	E601	1.9	2.5	0.61	1.9	9.7	<1	0.65	18	<0.5	210	4.9
PTU12-I	11-MAR-13	E601	1.8	2.2	0.63	2	10	<1	0.57	19	<0.5	110	5.8
PTU12-E	03-JAN-13	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU12-E	08-FEB-13	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU12-E	11-MAR-13	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFD-W													
PTU6-I	08-JAN-13	E601	<0.5	4.9	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	4.6	44
PTU6-I	12-FEB-13	E601	<0.5	5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	4.2	39
PTU6-I	06-MAR-13	E601	<0.5	5.1	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	4.8	41
PTU6-E	08-JAN-13	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU6-E	12-FEB-13	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU6-E	06-MAR-13	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFE-E													
PTU3-I	03-JAN-13	E601	<0.5	2.1	<0.5	<0.5	7.1	<1	6.9	8.9	<0.5	56	<0.5
PTU3-I	04-FEB-13	E601	<0.5	2.3	<0.5	<0.5	7.5	<1	6.8	8.3	<0.5	54	<0.5
PTU3-I	04-MAR-13	E601	<0.5	2	<0.5	<0.5	6.9	<1	6.4	7.3	<0.5	48	<0.5
PTU3-E	03-JAN-13	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU3-E	04-FEB-13	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU3-E	04-MAR-13	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5

Table A-1. VOC analyses of influent and effluent samples by treatment facility.

Sample Station	Date Sampled	Analytic Method	CTET <-	CFORM -	1,1-DCA -	1,2-DCA -	1,1-DCE ug/L (ppb)	1,2-DCE -	Freon 113 -	PCE -	1,1,1-TCA -	TCE -	Freon 11 ->
TFE-HS													
W-2105	16-JAN-13	E601	<0.5	1.1	<0.5	<0.5	2.8	3.8	4.4	16	<0.5	320	<0.5
GTU07-I	16-JAN-13	E601	<0.5	1.1	<0.5	<0.5	2.7	3.5	4.2	15	<0.5	290	<0.5
GTU07-I	04-FEB-13	E601	<0.5	1.1	<0.5	<0.5	2.5	3.4	3.5	14	<0.5	240	<0.5
GTU07-I	07-MAR-13	E601	<0.5	1	<0.5	<0.5	2.6	3.7	3.8	15	<0.5	270	<0.5
GTU07-E	16-JAN-13	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
GTU07-E	04-FEB-13	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
GTU07-E	07-MAR-13	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFE-NW													
PTU9-I	02-JAN-13	E601	<0.5	1.2	<0.5	<0.5	<0.5	<1	1.3	<0.5	<0.5	10	<0.5
PTU9-I	07-FEB-13	E601	<0.5	1.3	<0.5	<0.5	<0.5	<1	1.1	<0.5	<0.5	9.7	<0.5
PTU9-I	11-MAR-13	E601	<0.5	1.2	<0.5	<0.5	<0.5	<1	1.2	<0.5	<0.5	9.9	<0.5
PTU9-E	02-JAN-13	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU9-E	07-FEB-13	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU9-E	11-MAR-13	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFE-SE													
W-359	03-JAN-13	E601	3.6	1.4	<0.5	<0.5	16	<1	6.2	9.3	<0.5	220	0.93
MTU04-I	04-FEB-13	E601	3.8	1.5	<0.5	<0.5	17	<1	5.6	8.9	<0.5	210	1
MTU04-I	04-MAR-13	E601	3.4	1.3	<0.5	<0.5	15	<1	5.4	8.1	<0.5	200	0.81
MTU04-E	03-JAN-13	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
MTU04-E	04-FEB-13	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
MTU04-E	04-MAR-13	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFE-SW^b													
MTU03-I	14-JAN-13	E601	<0.5	<0.5	<0.5	<0.5	1.6	1.4	3.4	1.1	<0.5	14	<0.5
MTU03-I	17-JAN-13	E601	<0.5	<0.5	<0.5	<0.5	0.66	<1	1.1	0.69	<0.5	12	<0.5
MTU03-I	23-JAN-13	E601	<0.5	<0.5	<0.5	<0.5	0.63	<1	1.2	0.74	<0.5	12	<0.5
MTU03-I	04-FEB-13	E601	0.56	<0.5	<0.5	<0.5	0.55	<1	1	0.68	<0.5	11	<0.5
MTU03-I	11-FEB-13	E601	<0.5	<0.5	<0.5	<0.5	0.53	<1	0.95	0.65	<0.5	11	<0.5
MTU03-I	06-MAR-13	E601	0.57	0.67	<0.5	<0.5	0.66	<1	1.2	0.65	<0.5	12	<0.5
MTU03-E	14-JAN-13	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
MTU03-E	11-FEB-13	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
MTU03-E	06-MAR-13	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5

Table A-1. VOC analyses of influent and effluent samples by treatment facility.

Sample Station	Date Sampled	Analytic Method	CTET <-	CFORM -	1,1-DCA -	1,2-DCA -	1,1-DCE ug/L (ppb)	1,2-DCE -	Freon 113 -	PCE -	1,1,1-TCA -	TCE -	Freon 11 ->
TFE-W													
MTU05-I	09-JAN-13	E601	<0.5	1	<0.5	<0.5	2	<1	15	7.1	<0.5	31	0.54
MTU05-I	11-FEB-13	E601	<0.5	1.2	<0.5	<0.5	1.8	<1	12	6.7	<0.5	28	<0.5
MTU05-I	06-MAR-13	E601	<0.5	1	<0.5	<0.5	1.8	<1	13	6.5	<0.5	28	<0.5
TFG-1													
W-1111	07-JAN-13	E601	2.6	10	<0.5	<0.5	0.86	<1	0.53	1	<0.5	4	<0.5
GTU01-I	06-FEB-13	E601	2.6	12	<0.5	<0.5	0.85	<1	0.51	0.9	<0.5	3.6	<0.5
GTU01-I	11-MAR-13	E601	2.5	11	<0.5	<0.5	0.8	<1	<0.5	0.95	<0.5	3.6	<0.5
TFG-N													
MTU02-I	03-JAN-13	E601	<0.5	1.4	<0.5	<0.5	1.1	<1	1.2	18	<0.5	5.5	<0.5
MTU02-I	07-FEB-13	E601	<0.5	1.8	<0.5	<0.5	1.3	<1	1.3	15	<0.5	5.3	<0.5
MTU02-I	11-MAR-13	E601	<0.5	1.4	<0.5	<0.5	1.2	<1	1.2	15	<0.5	4.7	<0.5
TF406													
PTU5-I	08-JAN-13	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	5.1	<0.5
PTU5-I	11-FEB-13	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	4.2	<0.5
PTU5-I	06-MAR-13	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	4.1	<0.5
TF406-NW													
W-1801	07-JAN-13	E601	<0.5	1.1	<0.5	<0.5	<0.5	<1	4.3	0.71	<0.5	21	<0.5
GTU03-I	06-FEB-13	E601	<0.5	1.4	<0.5	<0.5	<0.5	<1	4.1	0.63	<0.5	20	<0.5
GTU03-I	11-MAR-13	E601	<0.5	1.2	<0.5	<0.5	<0.5	<1	3.9	0.65	<0.5	19	<0.5

Table A-1. VOC analyses of influent and effluent samples by treatment facility.

Sample Station	Date Sampled	Analytic Method	CTET <-	CFORM -	1,1-DCA -	1,2-DCA -	1,1-DCE ug/L (ppb)	1,2-DCE -	Freon 113 -	PCE -	1,1,1-TCA -	TCE -	Freon 11 ->
TF406-NW (cont.)													
GTU03-E	07-JAN-13	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
GTU03-E	06-FEB-13	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
GTU03-E	11-MAR-13	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TF518-N^c													
W-1410	15-FEB-13	E601	2.8	2.4	<0.5	0.57	<0.5	<1	<0.5	0.64	<0.5	20	<0.5
TF5475-1^d													
W-1302-2	13-FEB-13	E601	1.8	41	1.4	6.2	20	1.5	6.1	58	<0.5	420	<0.5
TF5475-2													
GTU09-I	07-JAN-13	E601	2	21	0.67	3	18	<1	7.1	39	<0.5	320	<0.5
GTU09-I	04-FEB-13	E601	2	21	0.63	2.8	17	<1	6.3	36	<0.5	280	<0.5
GTU09-I	05-MAR-13	E601	1.9	17	<0.5	2.4	16	<1	5.5	34	<0.5	260	<0.5
GTU09-E	07-JAN-13	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
GTU09-E	04-FEB-13	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
GTU09-E	05-MAR-13	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TF5475-3^e													
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Notes on following page.

Table A-1. VOC analyses of influent and effluent samples by treatment facility.

^a TFA-E did not operate during the first quarter reporting period due to lack of ground water in extraction well W-254, the sole source of water for this facility.

^b TFE-SW had multiple samples collected during the months of January and February due to facility restart following installation of the refurbished air stripper blower.

^c TF518-N did not operate during this reporting period due to mixed waste disposition issues.

^d TF5475-1 did not operate during this reporting period due to mixed waste disposition issues.

^e TF5475-3 did not operate during this reporting period due to mixed waste disposition issues.

Notes:

CTET = Carbon tetrachloride

CFORM = Chloroform

1,1-DCA = 1,1-Dichloroethane

1,2-DCA = 1,2-Dichloroethane

1,1-DCE = 1,1-Dichloroethylene

1,2-DCE = 1,2-Dichloroethylene

Freon 113 = Trichlorotrifluoroethane

PCE = Tetrachloroethylene

1,1,1-TCA = 1,1,1-Trichloroethane

TCE = Trichloroethene

Freon 11 = Trichlorofluoromethane

VOC = volatile organic compound

Numbers in **BOLD** print indicate positive values above the detection limit.

Table A-2. VOC analyses of samples from treatment facility extraction wells.

Extraction Well	Date Sampled	Analytic Method	CTET <-	CFORM -	1,1-DCA -	1,2-DCA -	1,1-DCE ug/L (ppb)	1,2-DCE -	Freon 113 -	PCE -	1,1,1-TCA -	TCE -	Freon 11 ->
TFA													
W-109	10-JAN-13	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	0.76	1.2	<0.5	<0.5	<0.5
W-262	10-JAN-13	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
W-404	10-JAN-13	E601	<0.5	<0.5	0.72	<0.5	0.95	<1	<0.5	6	<0.5	<0.5	<0.5
W-408	10-JAN-13	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	0.57	<0.5	<0.5	<0.5
W-415	10-JAN-13	E601	<0.5	1.4	0.68	<0.5	1.4	<1	<0.5	11	<0.5	1.1	<0.5
W-457	10-JAN-13	E601	<0.5	<0.5	0.78	<0.5	0.8	<1	<0.5	6.2	<0.5	<0.5	<0.5
W-518	10-JAN-13	E601	<0.5	<0.5	7.4	<0.5	3.4	<1	<0.5	3.7	<0.5	0.5	<0.5
W-522	10-JAN-13	E601	<0.5	<0.5	1.6	<0.5	1	<1	<0.5	3.5	<0.5	<0.5	<0.5
W-605	10-JAN-13	E601	<0.5	0.51	0.64	<0.5	0.95	<1	<0.5	18	<0.5	0.87	<0.5
W-614	10-JAN-13	E601	<0.5	0.52	<0.5	<0.5	<0.5	<1	<0.5	6.2	<0.5	<0.5	<0.5
W-712	10-JAN-13	E601	2.9	3.1	1.1	<0.5	3.5	<1	<0.5	2.1	<0.5	3.7	<0.5
W-714	10-JAN-13	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	7.9	<0.5	<0.5	<0.5
W-903	10-JAN-13	E601	<0.5	<0.5	0.96	<0.5	0.75	<1	<0.5	4.8	<0.5	<0.5	<0.5
W-904	10-JAN-13	E601	<0.5	<0.5	0.56	<0.5	0.87	<1	<0.5	5.9	<0.5	<0.5	<0.5
W-1001	10-JAN-13	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
W-1004	10-JAN-13	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	2.2	<0.5	<0.5	<0.5
W-1009	10-JAN-13	E601	1.1	5.2	0.7	<0.5	2.9	<1	0.67	12	<0.5	2	<0.5
TFA-E^a													
W-254	15-FEB-13	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	31	<0.5	0.8	<0.5
TFB													
W-357	09-JAN-13	E601	1.4	2.7	<0.5	<0.5	1.5	<1	5.5	1.2	<0.5	34	<0.5
W-610	09-JAN-13	E601	<0.5	<0.5	<0.5	<0.5	0.77	<1	1.2	0.56	<0.5	1.3	<0.5
W-620	09-JAN-13	E601	<0.5	1.1	<0.5	<0.5	1	<1	1.8	1.2	<0.5	4.2	<0.5
W-621	09-JAN-13	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	0.72	<0.5	<0.5	1.6	<0.5
W-655	09-JAN-13	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	5.8	<0.5	<0.5	1	<0.5
W-704	09-JAN-13	E601	0.52	3.6	<0.5	<0.5	2	<1	6.2	2.8	<0.5	19	<0.5
W-1423	09-JAN-13	E601	0.65	4.2	<0.5	<0.5	2.9	<1	4.3	2.2	<0.5	9.8	<0.5
W-2501	09-JAN-13	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	1.7	<0.5	<0.5	7.3	<0.5
W-2502	09-JAN-13	E601	0.76	4.1	<0.5	<0.5	2.2	<1	0.65	<0.5	<0.5	2.6	<0.5
TFC													
W-701	07-JAN-13	E601	<0.5	2	<0.5	<0.5	1.5	<1	29	3.5	<0.5	21	<0.5
W-1015	07-JAN-13	E601	<0.5	0.5	<0.5	<0.5	0.61	<1	1.9	0.95	<0.5	4.6	<0.5
W-1102	07-JAN-13	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	2.8	<0.5	<0.5	1.5	<0.5
W-1103	07-JAN-13	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	1.3	<0.5
W-1104	07-JAN-13	E601	<0.5	0.64	<0.5	<0.5	<0.5	<1	2.5	4.4	<0.5	8.8	<0.5
W-1116	07-JAN-13	E601	<0.5	1.1	<0.5	<0.5	<0.5	<1	6.6	4	<0.5	8.6	<0.5

Table A-2. VOC analyses of samples from treatment facility extraction wells.

Extraction Well	Date Sampled	Analytic Method	CTET <-	CFORM -	1,1-DCA -	1,2-DCA -	1,1-DCE ug/L (ppb)	1,2-DCE -	Freon 113 -	PCE -	1,1,1-TCA -	TCE -	Freon 11 ->
TFC-E													
W-368	22-JAN-13	E601	<0.5	5.5	<0.5	<0.5	<0.5	<1	24	3	<0.5	13	4.5
W-413	22-JAN-13	E601	<0.5	12	<0.5	<0.5	0.86	<1	12	<0.5	<0.5	7	3.5
TFC-SE													
W-1213	07-JAN-13	E601	<0.5	7.7	<0.5	<0.5	2.2	<1	8.2	<0.5	<0.5	15	<0.5
W-2201	07-JAN-13	E601	<0.5	7.5	<0.5	<0.5	1.7	<1	20	0.9	<0.5	16	1.3
TFD													
W-351	02-JAN-13	E601	25	4.2	<0.5	0.88	6.2	<1	5.6	7.8	<0.5	500	1.2
W-653	02-JAN-13	E601	21	6.2	<0.5	<0.5	0.72	<1	2.3	0.8	<0.5	680	<0.5
W-906	06-FEB-13	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	3.2	<0.5
W-907-2	02-JAN-13	E601	<0.5	4.5	<0.5	<0.5	2.9	<1	1.3	6.4	<0.5	67	<0.5
W-2011	02-JAN-13	E601	0.77	0.8	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	16	<0.5
W-2101	02-JAN-13	E601	4.6	2	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	190	<0.5
W-2102	02-JAN-13	E601	18	5.4	<0.5	<0.5	<0.5	<1	2.5	0.58	<0.5	580	1.4
W-1206	02-JAN-13	E601	0.9	3.2	<0.5	<0.5	0.5	<1	<0.5	<0.5	<0.5	18	<0.5
W-1208	02-JAN-13	E601	2.2	1.9	<0.5	<0.5	<0.5	<1	0.54	0.56	<0.5	48	37
TFD-E													
W-2006	03-JAN-13	E601	0.9	1.7	2.1	6.6	73	<1	<0.5	69	<0.5	370	<0.5
W-1301	03-JAN-13	E601	2.7	1.8	1.4	3.7	23	<1	<0.5	27	<0.5	200	<0.5
W-1303	03-JAN-13	E601	4	2.5	1	4	6.4	1.6	<0.5	8.5	<0.5	180	4.6
W-1306	03-JAN-13	E601	1.9	2	<0.5	<0.5	<0.5	<1	<0.5	2.4	<0.5	62	<0.5
W-1307	03-JAN-13	E601	2.4	0.57	<0.5	<0.5	<0.5	<1	<0.5	0.74	<0.5	34	<0.5
W-1550	03-JAN-13	E601	8.2	5.4	<0.5	<0.5	0.83	<1	0.8	3.2	<0.5	220	<0.5
W-2203	03-JAN-13	E601	11	2.8	<0.5	<0.5	2.2	<1	2.4	7	<0.5	110	<0.5
TFD-HPD													
W-1254	10-JAN-13	E601	1.3	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	34	<0.5
W-1650	31-JAN-13	E601	2.6	1.2	<0.5	<0.5	<0.5	<1	1.5	<0.5	<0.5	140	<0.5
W-1653	31-JAN-13	E601	<0.5	1.7	<0.5	<0.5	<0.5	4.3	<0.5	0.71	<0.5	97	<0.5
W-1655	31-JAN-13	E601	0.5	2	<0.5	<0.5	<0.5	2.5	<0.5	2.3	<0.5	59	<0.5
W-1657	31-JAN-13	E601	4	2.8	<0.5	<0.5	<0.5	2.4	2	<0.5	<0.5	320	<0.5
TFD-S													
W-1503	03-JAN-13	E601	1.5	1.7	<0.5	<0.5	1.2	<1	0.58	1.7	<0.5	46	<0.5
W-1504	03-JAN-13	E601	<0.5	<0.5	<0.5	<0.5	9.4	<1	2.6	16	<0.5	75	<0.5
W-1510	03-JAN-13	E601	<0.5	3	<0.5	<0.5	1.4	<1	<0.5	3.1	<0.5	22	<0.5

Table A-2. VOC analyses of samples from treatment facility extraction wells.

Extraction Well	Date Sampled	Analytic Method	CTET <-	CFORM -	1,1-DCA -	1,2-DCA -	1,1-DCE ug/L (ppb)	1,2-DCE -	Freon 113 -	PCE -	1,1,1-TCA -	TCE -	Freon 11 ->
TFD-SE													
W-314	03-JAN-13	E601	<0.5	2.8	0.62	0.51	3.6	<1	1.3	6.6	<0.5	53	<0.5
W-2005	03-JAN-13	E601	1.2	0.96	<0.5	1.3	12	<1	<0.5	15	<0.5	69	<0.5
W-1308	03-JAN-13	E601	<0.5	1	0.84	1.8	14	<1	<0.5	88	<0.5	83	<0.5
W-1403	03-JAN-13	E601	2.2	16	1.3	5.1	36	<1	4.1	89	<0.5	350	<0.5
W-1904	03-JAN-13	E601	<0.5	<0.5	<0.5	<0.5	4.6	<1	<0.5	27	<0.5	12	<0.5
SIP-ETC-201 ^b	11-DEC-12	E601	<0.5	0.85	3.2	1.3	80	<1	<0.5	520	<0.5	310	<0.5
TFD-SS													
W-1523	03-JAN-13	E601	3.4	4.9	<0.5	1.8	12	<1	2.3	25	<0.5	150	<0.5
W-1601	03-JAN-13	E601	3.8	4.1	1.3	5.9	25	1	1.7	94	<0.5	270	<0.5
W-1602	03-JAN-13	E601	<0.5	1.4	<0.5	<0.5	0.55	<1	<0.5	1.9	<0.5	13	4.2
W-1603	03-JAN-13	E601	1.5	1.9	0.79	2.8	11	<1	<0.5	24	<0.5	120	10
TFD-W													
W-1215	08-JAN-13	E601	<0.5	7.9	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	4.7	20
W-1216	08-JAN-13	E601	<0.5	4.6	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	3.1	32
W-1902	08-JAN-13	E601	<0.5	2.7	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	3.8	42
TFE-E													
W-566	03-JAN-13	E601	0.51	2.6	<0.5	<0.5	4.2	<1	7.9	3.1	<0.5	40	<0.5
W-1109	03-JAN-13	E601	<0.5	0.59	<0.5	<0.5	24	<1	5.2	48	<0.5	170	<0.5
W-1903	03-JAN-13	E601	<0.5	<0.5	<0.5	<0.5	17	<1	6.3	18	<0.5	35	<0.5
W-1909 ^b	14-NOV-11	E601	<0.5	<0.5	<0.5	<0.5	9.1	1.1	<0.5	5.4	<0.5	6.5	<0.5
W-2305	18-MAR-13	E601	<0.5	<0.5	0.77	<0.5	74	<1	25	91	<0.5	160	<0.5
TFE-HS													
W-2105	16-JAN-13	E601	<0.5	1.1	<0.5	<0.5	2.8	3.8	4.4	16	<0.5	320	<0.5
TFE-NW													
W-1211	02-JAN-13	E601	<0.5	1.5	<0.5	<0.5	<0.5	<1	1.7	<0.5	<0.5	8.8	<0.5
W-1409	02-JAN-13	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	1.1	<0.5	18	<0.5
TFE-SE													
W-359	03-JAN-13	E601	3.6	1.4	<0.5	<0.5	16	<1	6.2	9.3	<0.5	220	0.93
TFE-SW													
W-1516	20-MAR-13	E601	0.66	0.96	<0.5	<0.5	0.57	<1	1	0.68	<0.5	12	<0.5
W-1518	14-JAN-13	E601	<0.5	<0.5	<0.5	<0.5	1.6	1.4	3.4	1.1	<0.5	14	<0.5
W-1520	14-JAN-13	E601	14	9.1	<0.5	5.2	3.3	2.7	<0.5	22	<0.5	440	<0.5

Table A-2. VOC analyses of samples from treatment facility extraction wells.

Extraction Well	Date Sampled	Analytic Method	CTET <-	CFORM -	1,1-DCA -	1,2-DCA -	1,1-DCE ug/L (ppb)	1,2-DCE -	Freon 113 -	PCE -	1,1,1-TCA -	TCE -	Freon 11 ->
TFE-SW (cont.)													
W-1522	14-JAN-13	E601	0.87	2.7	0.99	<0.5	7.6	16	2.6	1.9	<0.5	70	<0.5
TFE-W													
W-292	09-JAN-13	E601	<0.5	0.76	<0.5	<0.5	0.96	2.4	1.6	1.4	<0.5	21	<0.5
W-305	09-JAN-13	E601	<0.5	1.2	<0.5	<0.5	2.5	<1	21	10	<0.5	38	0.77
TFG-1													
W-1111	07-JAN-13	E601	2.6	10	<0.5	<0.5	0.86	<1	0.53	1	<0.5	4	<0.5
TFG-N													
W-1806	03-JAN-13	E601	<0.5	0.5	<0.5	<0.5	<0.5	<1	<0.5	13	<0.5	3.1	<0.5
W-1807	03-JAN-13	E601	<0.5	1.8	<0.5	<0.5	1.6	<1	1.8	18	<0.5	5.8	<0.5
TF406													
W-1309	08-JAN-13	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	2.4	<0.5
W-1310	08-JAN-13	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	4.8	<0.5
TF406-NW													
W-1801	07-JAN-13	E601	<0.5	1.1	<0.5	<0.5	<0.5	<1	4.3	0.71	<0.5	21	<0.5
TF518-N^a													
W-1410	15-FEB-13	E601	2.8	2.4	<0.5	0.57	<0.5	<1	<0.5	0.64	<0.5	20	<0.5
TF518-PZ													
W-1615	17-JAN-13	E601	<0.5	<0.5	<0.5	<0.5	2.9	<1	<0.5	36	<0.5	140	<0.5
W-518-1913 ^b	23-MAY-11	E601	<0.5	<0.5	<0.5	<0.5	0.76	<1	<0.5	3.8	<0.5	29	<0.5
W-518-1914	17-JAN-13	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	44	<0.5	3.6	<0.5
W-518-1915	17-JAN-13	E601	<0.5	0.9	<0.5	<0.5	6	<1	<0.5	74	<0.5	640	<0.5
SVB-518-201 ^b	07-FEB-08	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	35	<0.5	8.5	<0.5
SVB-518-204 ^b	07-FEB-08	E601	<0.5	0.63	<0.5	<0.5	1.4	<1	<0.5	43	<0.5	550	<0.5
TF5475-1^a													
W-1302-2	13-FEB-13	E601	1.8	41	1.4	6.2	20	1.5	6.1	58	<0.5	420	<0.5
TF5475-2													
W-1108	07-JAN-13	E601	2.1	21	0.65	3.1	17	<1	7.1	40	<0.5	330	<0.5
W-1415 ^b	15-OCT-12	E601	<0.5	6.5	<0.5	<0.5	3	7.2	<0.5	5.8	<0.5	47	<0.5

Table A-2. VOC analyses of samples from treatment facility extraction wells.

Extraction Well	Date Sampled	Analytic Method	CTET <-	CFORM -	1,1-DCA -	1,2-DCA -	1,1-DCE ug/L (ppb)	1,2-DCE -	Freon 113 -	PCE -	1,1,1-TCA -	TCE -	Freon 11 ->
TF5475-3^a													
W-1604	13-FEB-13	E601	5.7	77	2.1	18	41	2.5	17	100	<0.5	890	<0.5
W-1605	13-FEB-13	E601	<0.5	21	<0.5	1.4	<0.5	3.4	<0.5	7.8	<0.5	60	<0.5
W-1608 ^b	26-SEP-12	E601	<0.5	28	0.69	2.7	2.8	32	<0.5	9.2	<0.5	84	<0.5
W-1609	13-FEB-13	E601	<0.5	25	<0.5	2.3	2.3	<1	<0.5	10	<0.5	100	<0.5

Notes on following page.

Table A-2. VOC analyses of samples from treatment facility extraction wells.

^a Most recent VOC sample results available.

^b Treatment Facility did not operate during reporting period. Please refer to Table A-1 for details.

Notes:

CTET = Carbon tetrachloride

CFORM = Chloroform

1,1-DCA = 1,1-Dichloroethane

1,2-DCA = 1,2-Dichloroethane

1,1-DCE = 1,1-Dichloroethylene

1,2-DCE = 1,2-Dichloroethylene

Freon 113 = Trichlorotrifluoroethane

PCE = Tetrachloroethylene

1,1,1-TCA = 1,1,1-Trichloroethane

TCE = Trichloroethene

Freon 11 = Trichlorofluoromethane

VOC = volatile organic compound

Numbers in **BOLD** print indicate positive values above the detection limit.

Table A-3. VOC analyses of vapor samples from treatment facility extraction wells.

Extraction Well	Date Sampled	Analytic Method	CTET <-	CFORM -	1,1-DCA -	1,2-DCA -	1,1-DCE PPM(V/V)	1,2-DCE -	Freon 113 -	PCE -	1,1,1-TCA -	TCE -	Freon 11 ->
VTFD-ETCS													
W-1904	11-FEB-13	TO15DIT	<0.005	<0.005	<0.005	<0.005	0.0077	<0.005	<0.005	0.17	<0.005	0.071	<0.005
W-ETC-2003	11-FEB-13	TO15DIT	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.092	<0.005	0.032	<0.005
W-ETC-2004A	11-FEB-13	TO15DIT	<0.005	0.012	<0.005	<0.005	<0.005	<0.005	<0.005	0.28	<0.005	0.098	<0.005
W-ETC-2004B	11-FEB-13	TO15DIT	<0.005	0.013	0.0053	<0.005	0.09	<0.005	<0.005	0.55	<0.005	1	<0.005
SIP-ETC-201	11-FEB-13	TO15DIT	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
VTFD-HS^a													
W-653 ^b	03-NOV-09	TO15DIT	0.026	<0.005	<0.005	<0.005	<0.005	<0.005	0.016	<0.005	<0.005	0.58	<0.005
W-2011 ^b	15-FEB-07	TO15DI	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.081	<0.005
W-2101 ^b	03-NOV-09	TO15DIT	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.052	<0.005
W-2102 ^b	15-FEB-07	TO15DI	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.11	<0.005
VTFE-ELM													
W-1903	06-MAR-13	TO15DIT	<0.005	<0.005	0.0069	<0.005	0.69	<0.005	0.19	0.68	<0.005	1.8	<0.005
W-1909 ^b	06-OCT-11	TO15DIT	<0.005	0.034	<0.005	<0.005	0.51	<0.005	0.054	0.88	<0.005	1.2	<0.005
W-2305 ^b	06-OCT-11	TO15DIT	<0.005	<0.005	<0.005	<0.005	0.2	<0.005	0.036	0.46	<0.005	0.55	<0.005
W-543-001	12-FEB-13	TO15DIT	<0.005	<0.005	<0.005	<0.005	0.0082	<0.005	<0.005	0.72	<0.005	0.12	<0.005
W-543-003	12-FEB-13	TO15DIT	<0.005	0.021	<0.005	<0.005	0.088	<0.005	0.024	0.26	<0.005	0.5	<0.005
W-543-1908	12-FEB-13	TO15DIT	<0.005	<0.005	<0.005	<0.005	0.0076	<0.005	<0.005	0.048	<0.005	0.17	<0.005
VTFE-HS													
W-2105	22-JAN-13	TO15DIT	<0.005	0.0077	<0.005	<0.005	0.019	<0.005	0.1	0.18	<0.005	2	<0.005
W-ETS-2008A	22-JAN-13	TO15DIT	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.0085	<0.005	0.011	<0.005
W-ETS-2008B	22-JAN-13	TO15DIT	<0.005	0.008	<0.005	<0.005	0.012	0.005	0.022	0.5	<0.005	0.93	<0.005
W-ETS-2009	22-JAN-13	TO15DIT	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.041	<0.005	0.12	<0.005
W-ETS-2010A	22-JAN-13	TO15DIT	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.16	<0.005	0.14	<0.005
W-ETS-2010B	22-JAN-13	TO15DIT	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.024	<0.005	0.034	<0.005
VTF406-HS													
W-217	22-JAN-13	TO15DIT	0.13	0.048	0.0092	<0.005	0.8	0.015	0.13	0.71	<0.005	1.9	0.0093
W-514-2007A	22-JAN-13	TO15DIT	0.085	<0.005	<0.005	<0.005	0.044	<0.005	0.12	0.067	<0.005	0.36	3.9
W-514-2007B	22-JAN-13	TO15DIT	0.06	0.026	0.005	<0.005	0.35	<0.005	0.053	0.27	<0.005	0.95	0.079
VTF511													
W-2204 ^b	13-NOV-12	TO15DIT	0.083	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.55	<0.05	4.8	<0.05
W-2205	13-MAR-13	TO15DIT	0.068	0.0083	<0.005	<0.005	0.018	<0.005	<0.005	0.12	<0.005	1.9	<0.005
W-2206	13-MAR-13	TO15DIT	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	0.11	<0.025	0.74	<0.025
W-2207A	20-FEB-13	TO15DIT	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.012	<0.005	0.37	<0.005
W-2207B	20-FEB-13	TO15DIT	<0.005	0.0061	<0.005	<0.005	<0.005	<0.005	<0.005	0.016	<0.005	1.4	<0.005

Table A-3. VOC analyses of vapor samples from treatment facility extraction wells.

Extraction Well	Date Sampled	Analytic Method	CTET <-	CFORM -	1,1-DCA -	1,2-DCA -	1,1-DCE PPM(V/V)	1,2-DCE -	Freon 113 -	PCE -	1,1,1-TCA -	TCE -	Freon 11 ->
VTF511 (cont.)													
W-2208A	20-FEB-13	TO15DIT	0.039	0.024	<0.01	<0.01	0.036	<0.01	<0.01	0.04	<0.01	7.2	0.042
W-2208B	20-FEB-13	TO15DIT	0.12	0.087	0.056	0.026	0.6	0.19	0.091	0.38	<0.02	16	0.099
VTF518-PZ													
W-1615	12-FEB-13	TO15DIT	0.014	<0.01	<0.01	<0.01	0.32	<0.01	0.061	2	<0.01	5.4	<0.01
W-518-1913	12-FEB-13	TO15DIT	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.0098	<0.005	0.052	<0.005
W-518-1914	12-FEB-13	TO15DIT	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	3.7	0.0059	0.22	<0.005
W-518-1915	12-FEB-13	TO15DIT	<0.017	<0.017	<0.017	<0.017	0.051	<0.017	<0.017	8.9	<0.017	4.1	<0.017
SVB-518-201	12-FEB-13	TO15DIT	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.12	<0.005	0.058	<0.005
SVB-518-204	12-FEB-13	TO15DIT	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.059	<0.005	0.059	<0.005
VTF5475^c													
W-ETS-507	21-FEB-13	TO15DIT	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.015	<0.005
W-1605 ^b	06-SEP-07	TO15DI	0.0069	0.17	<0.005	0.15	0.11	<0.005	0.036	0.1	<0.005	0.85	<0.005
W-1608 ^b	06-SEP-07	TO15DI	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.0061	<0.005
W-2211	21-FEB-13	TO15DIT	0.0098	0.43	0.012	0.042	0.25	<0.005	0.055	0.16	<0.005	1.2	<0.005
W-2212	21-FEB-13	TO15DIT	<0.005	0.015	<0.005	<0.005	<0.005	<0.005	<0.005	0.01	<0.005	0.076	<0.005
W-2302	21-FEB-13	TO15DIT	<0.005	0.018	<0.005	<0.005	0.01	<0.005	<0.005	0.0074	<0.005	0.21	<0.005
W-2303	21-FEB-13	TO15DIT	<0.005	0.32	0.011	0.048	0.06	<0.005	0.013	0.12	<0.005	1	<0.005
SVI-ETS-504	25-FEB-13	TO15DIT	<0.005	0.031	<0.005	<0.005	<0.005	<0.005	<0.005	0.015	<0.005	0.076	<0.005

Notes on following page.

Table A-3. VOC analyses of vapor samples from treatment facility extraction wells.

^a VTFD-HS did not operate during reporting period due to dual extraction well ground water pump failure. Extraction wells are operated cyclically without applied-vacuum. Ground water is treated at TFD.

^b Most recent VOC vapor sample results available.

^c VTF5475 did not operate during reporting period due to mixed waste disposition issues.

Notes:

CTET = Carbon tetrachloride

CFORM = Chloroform

1,1-DCA = 1,1-Dichloroethane

1,2-DCA = 1,2-Dichloroethane

1,1-DCE = 1,1-Dichloroethylene

1,2-DCE = 1,2-Dichloroethylene

Freon 113 = Trichlorotrifluoroethane

PCE = Tetrachloroethylene

1,1,1-TCA = 1,1,1-Trichloroethane

TCE = Trichloroethene

Freon 11 = Trichlorofluoromethane

VOC = volatile organic compound

Numbers in **BOLD** print indicate positive values above the detection limit.

Table A-4. Chromium analyses of influent, effluent and receiving water samples by treatment facility.

Treatment Facility	Sample Station	Date Sampled	Chromium (total)^a mg/L (ppm)	Hexavalent Chromium mg/L (ppm)
TFA	TFA-I001	03-JAN-13	0.012	NA
	TFA-E001	03-JAN-13	0.016	0.011
TFB	TFB-I002	03-JAN-13	0.02	NA
	TFB-E002	03-JAN-13	0.016	0.011
	TFB-E002	04-FEB-13	0.013	NA
	TFB-E002	04-MAR-13	0.015	NA
	TFB-R002	03-JAN-13	0.011	NA
TFC	TFC-I003	07-JAN-13	0.022	NA
	TFC-E003	07-JAN-13	0.014	0.015
	TFC-E003	04-FEB-13	0.014	NA
	TFC-E003	04-MAR-13	0.017	NA
	TFC-R003	07-JAN-13	0.0062	NA
TFC-E	MTU1-I	22-JAN-13	0.041	NA
	MTU1-I	19-MAR-13	0.042	NA
	MTU1-E	22-JAN-13	<0.005	<0.005
	MTU1-E	01-FEB-13	0.0053	NA
	MTU1-E	07-MAR-13	0.008	NA
TFC-SE	PTU1-I	07-JAN-13	0.026	NA
	PTU1-E	07-JAN-13	0.016	0.016
	PTU1-E	01-FEB-13	0.014	NA
	PTU1-E	04-MAR-13	0.019	NA
TFD	TFD-I004	02-JAN-13	0.012	NA
	TFD-E004	02-JAN-13	0.013	0.01
TFD-E	PTU8-I	03-JAN-13	0.0067	NA
	PTU8-E	03-JAN-13	0.0094	0.0054
TFD-HPD	PTU10-I	10-JAN-13	0.014	NA
	PTU10-E	10-JAN-13	0.011	0.011
TFD-S	PTU2-I	03-JAN-13	0.013	NA
	PTU2-E	03-JAN-13	0.014	0.01
TFD-SE	PTU11-I	03-JAN-13	0.01	NA
	PTU11-E	03-JAN-13	0.012	0.009
TFD-SS	PTU12-I	03-JAN-13	0.012	NA
	PTU12-E	03-JAN-13	0.012	0.011
TFD-W	PTU6-I	08-JAN-13	0.012	NA
	PTU6-E	08-JAN-13	0.011	0.011
TFE-E	PTU3-I	03-JAN-13	0.01	NA
	PTU3-E	03-JAN-13	0.012	0.0091
TFE-HS	GTU07-I	16-JAN-13	0.0047	NA
	GTU07-E	16-JAN-13	<0.005	<0.005
TFE-NW	PTU9-I	02-JAN-13	0.01	NA
	PTU9-E	02-JAN-13	0.012	0.0092
TFE-SE	W-359	03-JAN-13	0.0086	NA

Table A-4. Chromium analyses of influent, effluent and receiving water samples by treatment facility.

Treatment Facility	Sample Station	Date Sampled	Chromium (total)^a mg/L (ppm)	Hexavalent Chromium mg/L (ppm)
TFE-SE (cont.)				
	MTU04-E	03-JAN-13	0.0088	0.0078
TFE-SW	MTU03-I	14-JAN-13	0.0054	NA
	MTU03-E	14-JAN-13	0.0055	<0.005
TFE-W	MTU05-I	09-JAN-13	0.012	NA
	MTU05-E	09-JAN-13	0.0099	0.0092
TFG-1	W-1111	07-JAN-13	0.001	NA
	GTU01-E	07-JAN-13	<0.005	<0.005
	TFG-ASW	07-JAN-13	0.012	NA
TFG-N	MTU02-I	03-JAN-13	0.0079	NA
	MTU02-E	03-JAN-13	0.01	0.0071
TF406	PTU5-I	08-JAN-13	0.013	NA
	PTU5-E	08-JAN-13	0.012	0.013
TF406-NW	W-1801	07-JAN-13	0.002	NA
	GTU03-E	07-JAN-13	<0.005	<0.005
TF5475-2	GTU09-I	07-JAN-13	0.011	NA
	GTU09-E	07-JAN-13	<0.005	<0.005

^aA discharge limit of 0.050 ppm is set for total chromium during the dry season (April 1-November 30), and no limit is set for total chromium for the wet season (December 1-March 31); however, a limit of 0.022 ppm hexavalent chromium applies during the wet season. Discharge limits are defined in the Explanation of Significant Differences for metals discharge limits (April 1997).

Shaded values exceeded the discharge limit. See text for explanation.

Table A-5. Bioassay, turbidity, and chloride analyses of influent and effluent samples by treatment facility.

Treatment Facility	Sample Station	Date Sampled	Aquatic Bioassay^a Percent Survival	Turbidity Nephelometric Turbidity Units (NTU)	Chloride (mg/L)
TFA	TFA-E001	03-JAN-13	100 (100)	0.12	80
TFB	TFB-E002	03-JAN-13	100 (100)	0.23	69
TFC	TFC-E003	07-JAN-13	100 (100)	0.13	130
TFC-E	MTU1-E	22-JAN-13	100 (100)	0.13	180
TFC-SE	PTU1-E	07-JAN-13	100 (100)	0.15	93
TFD	TFD-E004	02-JAN-13	100 (100)	0.27	280
TFD-E	PTU8-E	03-JAN-13	100 (100)	0.15	310
TFD-HPD	PTU10-E	10-JAN-13	100 (100)	NA	470
	PTU10-E	31-JAN-13	NA	0.19	NA
TFD-S	PTU2-E	03-JAN-13	100 (100)	0.19	67
TFD-SE	PTU11-E	03-JAN-13	100 (100)	0.18	140
TFD-SS	PTU12-E	03-JAN-13	100 (100)	0.14	120
TFD-W	PTU6-E	08-JAN-13	100 (100)	0.12	200
TFE-E	PTU3-E	03-JAN-13	100 (100)	0.11	110
TFE-HS	GTU07-E	16-JAN-13	100 (100)	0.22	42
TFE-NW	PTU9-E	02-JAN-13	100 (100)	0.22	89
TFE-SE	MTU04-E	03-JAN-13	100 (100)	0.16	97
TFE-SW	MTU03-E	14-JAN-13	100 (100)	0.34	75
TFE-W	MTU05-E	09-JAN-13	100 (100)	0.13	57
TFG-1	GTU01-E	07-JAN-13	100 (100)	0.13	32
TFG-N	MTU02-E	03-JAN-13	100 (100)	0.13	35
TF406	PTU5-E	08-JAN-13	100 (100)	0.45	76
TF406-NW	GTU03-E	07-JAN-13	100 (100)	0.17	47
TF5475-2	GTU09-E	07-JAN-13	100 (100)	0.14	110

^aTest species was Fathead minnow and the test duration was 96 hours.

Percent survival in the control group samples shown in parentheses.

Note: NA = not applicable

Table A-6. Metals analyses of influent and effluent samples by treatment facility as compared to the instantaneous Maximum.

		Antimony	Arsenic	Beryllium	Cadmium	Copper	Lead	Mercury	Nickel	Selenium	Silver	Thallium	Zinc
		<-	-	-	-	-	mg/L (ppm)	-	-	-	-	-	->
Wet Season ^a (December 1 - March 31)		NA	0.01	NA	0.002	0.0236	0.006	0.002	0.3	0.01	0.1	NA	0.220
Sample Station	Date Sampled												
TFA													
TFA-E001	03-JAN-13	<0.005	<0.005	<0.001	<0.001	<0.005	<0.005	<0.0002	<0.005	<0.005	<0.005	<0.001	<0.01
TFB													
TFB-E002	03-JAN-13	<0.005	<0.005	<0.001	<0.001	<0.005	<0.005	<0.0002	0.013	<0.005	<0.005	<0.001	<0.01
TFC													
TFC-E003	07-JAN-13	<0.005	<0.005	<0.001	<0.001	<0.005	<0.005	<0.0002	<0.005	<0.005	<0.005	<0.001	<0.01
TFC-E													
MTU1-E	22-JAN-13	<0.005	<0.005	<0.001	<0.001	<0.005	<0.005	<0.0002	<0.005	<0.005	<0.005	<0.001	<0.01
TFC-SE													
PTU1-E	07-JAN-13	<0.005	<0.005	<0.001	<0.001	<0.005	<0.005	<0.0002	<0.005	<0.005	<0.005	<0.001	<0.01
TFD													
TFD-E004	02-JAN-13	<0.005	<0.005	<0.001	<0.001	<0.005	<0.005	<0.0002	<0.005	<0.005	<0.005	<0.001	<0.01
TFD-E													
PTU8-E	03-JAN-13	<0.005	<0.005	<0.001	<0.001	<0.005	<0.005	<0.0002	<0.005	<0.005	<0.005	<0.001	<0.01
TFD-HPD													
PTU10-E	10-JAN-13	<0.005	<0.005	<0.001	<0.001	<0.005	<0.005	<0.0002	<0.005	<0.005	<0.005	<0.001	<0.01
TFD-S													
PTU2-E	03-JAN-13	<0.005	<0.005	<0.001	<0.001	<0.005	<0.005	<0.0002	<0.005	<0.005	<0.005	<0.001	0.027
TFD-SE													
PTU11-E	03-JAN-13	<0.005	<0.005	<0.001	<0.001	<0.005	<0.005	<0.0002	<0.005	<0.005	<0.005	<0.001	<0.01
TFD-SS													
PTU12-E	03-JAN-13	<0.005	<0.005	<0.001	<0.001	<0.005	<0.005	<0.0002	<0.005	<0.005	<0.005	<0.001	<0.01
TFD-W													
PTU6-E	08-JAN-13	<0.005	<0.005	<0.001	<0.001	<0.005	<0.005	<0.0002	<0.005	<0.005	<0.005	<0.001	<0.01

Table A-6. Metals analyses of influent and effluent samples by treatment facility as compared to the instantaneous Maximum.

		Antimony	Arsenic	Beryllium	Cadmium	Copper	Lead	Mercury	Nickel	Selenium	Silver	Thallium	Zinc
		<-	-	-	-	-	mg/L (ppm)	-	-	-	-	-	->
Wet Season^a (December 1 - March 31)		NA	0.01	NA	0.002	0.0236	0.006	0.002	0.3	0.01	0.1	NA	0.220
Sample Station	Date Sampled												
TFE-E													
PTU3-E	03-JAN-13	<0.005	<0.005	<0.001	<0.001	<0.005	<0.005	<0.0002	<0.005	<0.005	<0.005	<0.001	<0.01
TFE-HS													
GTU07-E	16-JAN-13	<0.005	<0.005	<0.001	<0.001	<0.005	<0.005	<0.0002	<0.005	<0.005	<0.005	<0.001	<0.01
TFE-NW													
PTU9-E	02-JAN-13	<0.005	<0.005	<0.001	<0.001	<0.005	<0.005	<0.0002	<0.005	<0.005	<0.005	<0.001	<0.01
TFE-SE													
MTU04-E	03-JAN-13	<0.005	<0.005	<0.001	<0.001	<0.005	<0.005	<0.0002	<0.005	<0.005	<0.005	<0.001	<0.01
TFE-SW													
MTU03-E	14-JAN-13	<0.005	<0.005	<0.001	<0.001	<0.005	<0.005	<0.0002	<0.005	<0.005	<0.005	<0.001	<0.01
TFE-W													
MTU05-E	09-JAN-13	<0.005	<0.005	<0.001	<0.001	<0.005	<0.005	<0.0002	<0.005	<0.005	<0.005	<0.001	<0.01
TFG-1													
GTU01-E	07-JAN-13	<0.005	<0.005	<0.001	<0.001	<0.005	<0.005	<0.0002	<0.005	<0.005	<0.005	<0.001	<0.01
TFG-N													
MTU02-E	03-JAN-13	<0.005	<0.005	<0.001	<0.001	<0.005	<0.005	<0.0002	<0.005	<0.005	<0.005	<0.001	<0.01
TF406													
PTU5-E	08-JAN-13	<0.005	<0.005	<0.001	<0.001	<0.005	<0.005	<0.0002	<0.005	<0.005	<0.005	<0.001	<0.01
TF406-NW													
GTU03-E	07-JAN-13	<0.005	<0.005	<0.001	<0.001	<0.005	<0.005	<0.0002	<0.005	<0.005	<0.005	<0.001	<0.01
TF5475-2													
GTU09-E	07-JAN-13	<0.005	<0.005	<0.001	<0.001	<0.005	<0.005	<0.0002	<0.005	<0.005	<0.005	<0.001	<0.01

^aThe Explanation of Significant Differences for metals discharge identifies the Instantaneous Maximum concentrations for the wet season (December 1 - March 30).

NA = not applicable

Numbers in **BOLD** print indicate positive values above the detection limit.

Shaded values exceeded the discharge limit. See text for explanation.

Table A-7. Radiological analyses of effluent and receiving waters by treatment facility.

Treatment Facility	Sample Station	Date Sampled	Gross Alpha <-	Gross Beta pCi/L	Tritium ->
TFA	TFA-E001	03-JAN-13	3.72	3.66	<100
TFB	TFB-E002	03-JAN-13	2	<3	110
TFB	TFB-R002	03-JAN-13	3.82	3.73	<100
TFC	TFC-E003	07-JAN-13	2.59	<3	146
TFC	TFC-R003	07-JAN-13	2.8	<3	<100
TFC-E	MTU1-E	22-JAN-13	<2	<3	274
TFC-SE	PTU1-E	07-JAN-13	2.48	3.15	214
TFD	TFD-E004	02-JAN-13	<2	<3	<100
TFD-E	PTU8-E	03-JAN-13	6.79	4.37	<100
TFD-HPD	PTU10-E	10-JAN-13	4.6	3.69	<100
TFD-S	PTU2-E	03-JAN-13	4.19	<3	171
TFD-SE	PTU11-E	03-JAN-13	4.28	<3	252
TFD-SS	PTU12-E	03-JAN-13	3.59	<3	115
TFD-W	PTU6-E	08-JAN-13	8.11	3.06	<100
TFE-E	PTU3-E	03-JAN-13	2.36	<3	<100
TFE-HS	GTU07-E	16-JAN-13	<2	3.45	<100
TFE-NW	PTU9-E	02-JAN-13	5.81	3.68	<100
TFE-SE	MTU04-E	03-JAN-13	<2	3.14	<100
TFE-SW	MTU03-E	14-JAN-13	4.14	<3	263
TFE-W	MTU05-E	09-JAN-13	5.81	3.98	<100
TFG-1	GTU01-E	07-JAN-13	3.55	3.19	177
TFG-1	TFG-ASW	07-JAN-13	3.65	<3	<100
TFG-N	MTU02-E	03-JAN-13	4.3	4.3	129
TF406	PTU5-E	08-JAN-13	<2	<3	<100
TF406-NW	GTU03-E	07-JAN-13	5.62	3.09	<100
TF5475-2	GTU09-E	07-JAN-13	<2	<3	485

Numbers in **BOLD** print indicate positive values above the detection limit.

Explanation of Abbreviations

TFA-I001 is a sampling port located immediately prior to the TFA Treatment System.

TFA-E001 is a sampling port located immediately after the TFA Treatment System, at the beginning of the discharge pipeline.

TFA receiving water is routinely sampled at the TFG-ASW location.

TFB-I002 is a sampling port located immediately prior to the TFB Treatment System.

TFB-E002 is a sampling port located immediately after the TFB Treatment System, at the beginning of the discharge pipeline.

TFB-R002 is a sampling station in the drainage ditch north of TFB, located approximately 75 ft downstream from the discharge point.

TFC-I003 is a sampling port located immediately prior to the TFC Treatment System.

TFC-E003 is a sampling port located immediately after the TFC Treatment System, at the beginning of the discharge pipeline.

TFC-R003 is a sampling station in Arroyo Las Positas, located approximately 75 ft downstream from the TFC discharge point.

TFD-I004 is a sampling port located immediately prior to the TFD Treatment System.

TFD-E004 is a sampling port located immediately after the TFD Treatment System, prior to discharge to the Lake Hausmann or to the underground discharge pipeline leading to Arroyo Las Positas.

TFD-R004 is now combined with and collected at the TFC-R003 location. Results are reported under TFC-R003, as approved by the RWQCB.

CRD1-I is a sampling port located immediately prior to the catalytic column in the Catalytic Reductive Dehalogenation treatment unit 1 (CRD1).

CRD1-E is the effluent from the catalytic column in the Catalytic Reductive Dehalogenation treatment unit 1 (CRD1) and then reinjected at W-1302.

CRD2-I is a sampling port located immediately prior to the catalytic columns in the Catalytic Reductive Dehalogenation treatment unit 2 (CRD2).

CRD2-E is the effluent from the last catalytic column in the Catalytic Reductive Dehalogenation treatment unit 2 (CRD2) and then reinjected at W-1610.

GTU01-I is a sampling port located immediately prior to GTU01, which is currently operating in the TFG-1 area.

GTU01-E is a sampling port located immediately after GTU01, which is currently operating in the TFG-1 area.

GTU01 receiving water is routinely sampled at the TFG-ASW location.

GTU03-I is a sampling port located immediately prior to GTU03, which is currently operating in the TF406 Northwest area.

GTU03-E is a sampling port located immediately after GTU03, which is currently operating in the TF406 Northwest area.

GTU03 receiving water is routinely sampled at the TFC-R003 location.

GTU07-I is a sampling port located immediately prior to GTU07, which is currently operating in the TFE Hotspot area.

GTU07-E is a sampling port located immediately after GTU07, which is currently operating in the TFE Hotspot area.

GTU07 receiving water is routinely sampled at the TFC-R003 location.

GTU09-I is a sampling port located immediately prior to GTU09, which is currently operating in the TF5475 area.

GTU09-E is a sampling port located immediately after GTU09, which is currently operating in the TF5475 area.

GTU09 receiving water is routinely sampled at the TFC-R003 location.

MTU02-I is a sampling port located immediately prior to MTU02, which is currently operating in the TFG North area.

MTU02-E is a sampling port located immediately after MTU02, which is currently operating in the TFG North area.

MTU02 receiving water is routinely sampled at the TFC-R003 location.

MTU03-I is a sampling port located immediately prior to MTU03, which is currently operating in the TFE Southwest area.

MTU03-E is a sampling port located immediately after MTU03, which is currently operating in the TFE Southwest area.

MTU03 receiving water is routinely sampled at the TFC-R003 location.

MTU04-I is a sampling port located immediately prior to MTU04, which is currently operating in the TFE Southeast area.

MTU04-E is a sampling port located immediately after MTU04, which is currently operating in the TFE Southeast area.

MTU04 receiving water is routinely sampled at the TFC-R003 location.

MTU05-I is a sampling port located immediately prior to MTU05, which is currently operating in the TFE West area.

MTU05-E is a sampling port located immediately after MTU05, which is currently operating in the TFE West area.

MTU05 receiving water is routinely sampled at the TFC-R003 location.

MTU1-I is a sampling port located immediately prior to MTU1, which is currently operating in the TFC East area.

MTU1-E is a sampling port located immediately after MTU1, which is currently operating in the TFC East area.

Explanation of Abbreviations

MTU1 receiving water is routinely sampled at the TFC-R003 location.

PTU1-I is a sampling port located immediately prior to PTU-1, which is currently operating in the TFC Southeast area.

PTU1-E is a sampling port located immediately after PTU-1, which is currently operating in the TFC Southeast area.

PTU1 receiving water is routinely sampled at the TFC-R003 location.

PTU2-I is a sampling port located immediately prior to PTU-2, which is currently operating in the TFD South area.

PTU2-E is a sampling port located immediately after PTU-2, which is currently operating in the TFD South area.

PTU2 receiving water is routinely sampled at TFC-R003 during the wet season.

PTU3-I is a sampling port located immediately prior to PTU-3, which is currently operating in the TFE East area.

PTU3-E is a sampling port located immediately after PTU-3, which is currently operating in the TFE East area.

PTU3 receiving water is routinely sampled at the TFC-R003 location.

PTU5-I is a sampling port located immediately prior to PTU-5, which is currently operating in the TF406 extraction location.

PTU5-E is a sampling port located immediately after PTU-5, which is currently operating in the TF406 extraction location.

PTU5 receiving water is routinely sampled at the TFC-R003 location.

PTU6-I is a sampling port located immediately prior to PTU-6, which is currently operating in the TFD West area.

PTU6-E is a sampling port located immediately after PTU-6, which is currently operating in the TFD West area.

PTU6 receiving water is routinely sampled at the TFC-R003 location.

PTU8-I is a sampling port located immediately prior to PTU-8, which is currently operating in the TFD East area.

PTU8-E is a sampling port located immediately after PTU-8, which is currently operating in the TFD East area.

PTU8 receiving water is routinely sampled at the TFC-R003 location.

PTU9-I is a sampling port located immediately prior to PTU-9, which is currently operating in the TFE Northwest area.

PTU9-E is a sampling port located immediately after PTU-9, which is currently operating in the TFE Northwest area.

PTU9 receiving water is routinely sampled at the TFC-R003 location.

PTU10-I is a sampling port located immediately prior to PTU-10, which is currently operating in the TFD Helipad area.

PTU10-E is a sampling port located immediately after PTU-10, which is currently operating in the TFD Helipad area.

PTU10 receiving water is routinely sampled at the TFC-R003 location.

PTU11-I is a sampling port located immediately prior to PTU-11, which is currently operating in the TFD Southeast area.

PTU11-E is a sampling port located immediately after PTU-11, which is currently operating in the TFD Southeast area.

PTU11 receiving water is routinely sampled at the TFC-R003 location.

PTU12-I is a sampling port located immediately prior to PTU-12, which is currently operating in the TFD Southshore area.

PTU12-E is a sampling port located immediately after PTU-12, which is currently operating in the TFD Southshore area.

PTU12 receiving water is routinely sampled at the TFC-R003 location.

STU06-I is a sampling port located immediately prior to STU06, which is operating in the TFA East area.

STU06-E is a sampling port located immediately after STU06, which is operating in the TFA East area.

STU06 receiving water is routinely sampled at the TFG-ASW location.

STU09-I is a sampling port located immediately prior to STU09, which is currently operating in the TF518-North area.

STU09-E is a sampling port located immediately after STU09, which is currently operating in the TF518-North area.

STU09 receiving water is routinely sampled at the TFC-R003 location.

Attachment B

Self-Monitoring Reports

Self-Monitoring Report

LLNL Treatment Facility A (TFA)

AREA TFA

1. Reporting Period: Business Month January Year 2013

2. Dates (in **bold** and underline) treated ground water was discharged

December	<u>29</u>	<u>30</u>	<u>31</u>																		
January	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>						
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>	<u>31</u>					

Total monthly time facility operated (hours): 797

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>01-03-2013</u>
Influent pH:	<u>7.5</u>
Effluent pH:	<u>7.5</u>
Effluent Temperature (°C):	<u>18.2</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-109	880	0.0
W-262	102	0.0
W-404	1,493,930	31.5
W-408	441,200	9.6
W-415	1,818,240	39.0
W-457	981,920	22.1
W-518	218,456	4.6
W-522	765,232	16.2
W-605	327,324	8.0
W-614	520,252	10.9
W-712	233,401	6.6
W-714	393,602	8.6
W-903	641,672	13.5
W-904	1,724,400	37.6
W-1001	193,404	4.1
W-1004	537,888	11.3
W-1009	1,130,984	23.8
Total:	<u>11,422,887</u>	<u>247.4</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>West Perimeter Drainage Channel</u>	<u>TFB-R002</u>	<u>5,525,787</u>

Self-Monitoring Report (cont'd)
LLNL Treatment Facility A (TFA)
AREA TFA

Arroyo Seco

TFG-ASW

5,897,100

6. Comments:

Started W-605 on 1-2-13. Secured W-712 on 1-22-13. Facility down on 1-24-13 due to rain water in Susan Lane vault. Restarted on 1-25-13. Facility down on 1-28-13 due to low air stripper pressure. Restarted on 1-29-13.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Scott Kawaguchi Date: 02-04-2013

Self-Monitoring Report

LLNL Treatment Facility A (TFA)

AREA TFA

1. Reporting Period: Business Month February Year 2013

2. Dates (in **bold** and underline) treated ground water was discharged

February 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28

Total monthly time facility operated (hours): 599

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 02-04-2013
 Influent pH: 7.0
 Effluent pH: 7.5
 Effluent Temperature (°C): 17

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-109	0	0.0
W-262	0	0.0
W-404	1,146,379	31.1
W-408	349,432	9.3
W-415	1,269,808	39.2
W-457	714,584	19.2
W-518	164,086	4.6
W-522	586,348	16.4
W-605	305,408	8.8
W-614	393,708	11.1
W-712	69,024	7.0
W-714	297,613	8.4
W-903	504,952	12.7
W-904	1,370,560	37.1
W-1001	148,976	4.0
W-1004	404,936	11.7
W-1009	863,552	24.5
Total:	<u>8,589,366</u>	<u>245.1</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>West Perimeter Drainage Channel</u>	<u>TFB-R002</u>	<u>4,156,266</u>

Self-Monitoring Report (cont'd)
LLNL Treatment Facility A (TFA)
AREA TFA

Arroyo Seco

TFG-ASW

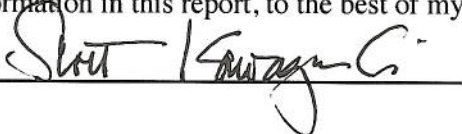
4,433,100

6. Comments:

Facility down on 2-17-13 due to low air flow. Restarted on 2-19-13. Facility down on 2-19-13 due to flooded vault. Restarted on 2-20-13. W-712 started on 2-20-13.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: _____



Date: 03-01-2013

Self-Monitoring Report

LLNL Treatment Facility A (TFA)

AREA TFA

1. Reporting Period: Business Month March Year 2013

2. Dates (in **bold** and underline) treated ground water was discharged

March **01** **02** **03** **04** **05** **06** **07** **08** **09** 10 11 12 13 14 15
 16 **17** **18** **19** **20** **21** **22** **23** 24 **25** **26** **27** **28** **29**

Total monthly time facility operated (hours): **584**

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): **03-01-2013**
 Influent pH: **7.0**
 Effluent pH: **7.5**
 Effluent Temperature (°C): **17.8**

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-109	0	0.0
W-262	0	0.0
W-404	1,126,711	32.4
W-408	351,248	10.0
W-415	1,326,064	38.1
W-457	566,416	19.7
W-605	296,708	8.7
W-518	149,030	4.6
W-522	477,560	16.7
W-614	379,152	11.0
W-1001	141,360	4.2
W-1004	388,640	11.2
W-1009	830,592	24.0
W-712	241,632	6.3
W-714	295,976	8.6
W-903	475,904	14.2
W-904	1,364,896	39.2
Total:	<u>8,411,889</u>	<u>248.9</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>West Perimeter Drainage Channel</u>	<u>TFB-R002</u>	<u>4,033,889</u>

Self-Monitoring Report (cont'd)
LLNL Treatment Facility A (TFA)
AREA TFA

Arroyo Seco

TFG-ASW

4,378,000

6. Comments:

Down 3-9-13 due to power surge. Restarted 3-11-13. Down 3-11-13 due to I/O fault. Restarted 3-12-13. Down 3-23-13 due to low air flow. Restarted 3-25-13. Down 3-25-13 due to I/O fault. Restarted 3-26-13.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: _____

Scott Kawaguchi

Date: 04-05-2013

Self-Monitoring Report
LLNL Solar Treatment Unit 06 (STU06)
AREA TFA-E

1. Reporting Period: Business Month January Year 2013

2. Dates (in **bold** and underline) treated ground water was discharged

December	28	29	30	31															
January	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15				
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30				

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-254	0	0.0
Total:	<u>0</u>	<u>0.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Seco</u>	<u>TFG-ASW</u>	<u>0</u>

6. Comments:

Facility secured due to lack of water in extraction well.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **01-31-2013**

Self-Monitoring Report
LLNL Solar Treatment Unit 06 (STU06)
AREA TFA-E

1. Reporting Period: Business Month February Year 2013

2. Dates (in **bold** and underline) treated ground water was discharged

January	31														
February	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
	16	17	18	19	20	21	22	23	24	25	26	27	28		

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-254	0	0.0
Total:	<u>0</u>	<u>0.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Seco</u>	<u>TFG-ASW</u>	<u>0</u>

6. Comments:

Facility secured due to lack of water in extraction well.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Steve Kawaguchi Date: 03-01-2013

Self-Monitoring Report
LLNL Solar Treatment Unit 06 (STU06)
AREA TFA-E

1. Reporting Period: Business Month March Year 2013

2. Dates (in **bold** and underline) treated ground water was discharged

March	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
	16	17	18	19	20	21	22	23	24	25	26	27	28		

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-254	0	0.0
Total:	<u>0</u>	<u>0.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Seco</u>	<u>TFG-ASW</u>	<u>0</u>

6. Comments:

Facility secured due to lack of water in extraction well.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Scott Kawaguchi Date: 03-29-2013

Self-Monitoring Report
LLNL Treatment Facility B (TFB)
AREA TFB

1. Reporting Period: Business Month January Year 2013

2. Dates (in **bold** and underline) treated ground water was discharged

December 29 30 31
January 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Total monthly time facility operated (hours): 825

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 01-03-2013
Influent pH: 7.0
Effluent pH: 7.5
Effluent Temperature (°C): 18.3

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-2501	794,841	16.2
W-2502	243,719	5.0
W-357	384,512	7.9
W-610	285,044	5.9
W-620	279,064	5.7
W-621	172	0.0
W-655	100	0.0
W-704	805,856	16.5
W-1423	228,588	5.3
Total:	<u>3,021,896</u>	<u>62.5</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>West Perimeter Drainage Channel</u>	<u>TFB-R002</u>	<u>3,021,896</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 02-01-2013

**Self-Monitoring Report
LLNL Treatment Facility B (TFB)
AREA TFB**

1. Reporting Period: Business Month February Year 2013

2. Dates (in **bold** and underline) treated ground water was discharged

February 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28

Total monthly time facility operated (hours): 684

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 02-04-2013
Influent pH: 7.0
Effluent pH: 7.5
Effluent Temperature (°C): 16.2

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-357	318,440	7.9
W-610	225,780	5.8
W-620	225,040	5.6
W-621	0	0.0
W-655	0	0.0
W-704	674,608	16.7
W-1423	178,852	4.4
W-2501	648,104	16.1
W-2502	199,555	4.9
Total:	<u>2,470,379</u>	<u>61.4</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>West Perimeter Drainage Channel</u>	<u>TFB-R002</u>	<u>2,470,379</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Scott Karyan Date: 03-01-2013

Self-Monitoring Report

LLNL Treatment Facility B (TFB)

AREA TFB

1. Reporting Period: Business Month March Year 2013

2. Dates (in **bold** and underline) treated ground water was discharged

March **01** **02** **03** **04** **05** **06** **07** **08** **09** 10 11 12 13 14 15
 16 **17** **18** **19** **20** **21** **22** **23** **24** **25** **26** **27** **28** **29**

Total monthly time facility operated (hours): **661**

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): **03-04-2013**
 Influent pH: **7.0**
 Effluent pH: **7.5**
 Effluent Temperature (°C): **17.3**

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-357	316,072	7.5
W-610	231,316	5.5
W-620	221,532	5.5
W-621	0	0.0
W-655	0	0.0
W-704	653,824	16.8
W-1423	185,672	4.3
W-2501	635,406	16.0
W-2502	201,061	5.0
Total:	<u>2,444,883</u>	<u>60.6</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>West Perimeter Drainage Channel</u>	<u>TFB-R002</u>	<u>2,444,883</u>

6. Comments:

Facility down on 3-9-13 due to power surge. Restarted on 3-11-13.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: *Steve Kawaguchi* Date: **04-05-2013**

**Land Observation Report date:
TFB-R002 - West Perimeter Drainage Channel**

1. Reporting Period: Business Month January Year 2013

2. Date compliance sampling performed 01-03-2013

3. Weather Conditions:

Average air tempertaure (°C):	<u>4.72</u>
6-day total precipitation (in):	<u>0.06</u>
Average wind speed/direction (mph):	<u>3/ ESE</u>

4. Receiving Data:

Sample		
<u>Location</u>	<u>pH</u>	<u>Temperature (C)</u>
<u>Receiving Water</u>	<u>7.5</u>	<u>16.0</u>

5. Land Observations, as "Yes" or "No", for reporting month:

<u>Visual Observations</u>	<u>Effluent</u>	<u>Receiving Water</u>
Floating and Suspended Materials of Waste Origin	<u>No</u>	<u>No</u>
Odor	<u>No</u>	<u>No</u>
Discoloration and Turbidity	Not Required	<u>No</u>
Evidence of Beneficial Water Use	Not Required	<u>No</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Steve Kaway Date: 02-08-2013

Land Observation Report date:
TFB-R002 - West Perimeter Drainage Channel

1. Reporting Period: Business Month February Year 2013

2. Date compliance sampling performed 02-04-2013

3. Weather Conditions:

Average air tempertaure (°C):	<u>9.79</u>
6-day total precipitation (in):	<u>0.01</u>
Average wind speed/direction (mph):	<u>3/ SE</u>

4. Receiving Data:

Sample		
<u>Location</u>	<u>pH</u>	<u>Temperature (C)</u>
<u>Receiving Water</u>	<u>N/M</u>	<u>N/M</u>

5. Land Observations, as "Yes" or "No", for reporting month:

<u>Visual Observations</u>	<u>Effluent</u>	<u>Receiving Water</u>
Floating and Suspended Materials of Waste Origin	<u>No</u>	<u>No</u>
Odor	<u>No</u>	<u>No</u>
Discoloration and Turbidity	Not Required	<u>No</u>
Evidence of Beneficial Water Use	Not Required	<u>No</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Scott Kawaguchi Date: 03-12-2013

**Land Observation Report date:
TFB-R002 - West Perimeter Drainage Channel**

1. Reporting Period: Business Month March Year 2013

2. Date compliance sampling performed 03-04-2013

3. Weather Conditions:

Average air tempertaure (°C):	<u>11.72</u>
6-day total precipitation (in):	<u>0.00</u>
Average wind speed/direction (mph):	<u>3/ SSE</u>

4. Receiving Data:

Sample		
<u>Location</u>	<u>pH</u>	<u>Temperature (C)</u>
<u>Receiving Water</u>	<u>N/M</u>	<u>N/M</u>

5. Land Observations, as "Yes" or "No", for reporting month:

<u>Visual Observations</u>	<u>Effluent</u>	<u>Receiving Water</u>
Floating and Suspended Materials of Waste Origin	<u>No</u>	<u>No</u>
Odor	<u>No</u>	<u>No</u>
Discoloration and Turbidity	Not Required	<u>No</u>
Evidence of Beneficial Water Use	Not Required	<u>No</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Scott Kawaguchi Date: 04-05-2013

Self-Monitoring Report

LLNL Treatment Facility C (TFC)

AREA TFC

1. Reporting Period: Business Month January Year 2013

2. Dates (in **bold** and underline) treated ground water was discharged

December	<u>29</u>	<u>30</u>	<u>31</u>																		
January	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>						
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>	<u>31</u>					

Total monthly time facility operated (hours): 825

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>01-07-2013</u>
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.5</u>
Effluent Temperature (°C):	<u>17.1</u>

4. Wellfield Data:

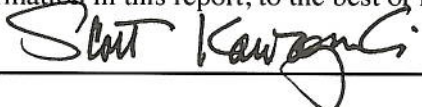
<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-701	594,552	12.2
W-1015	191,460	3.9
W-1102	171,060	3.5
W-1103	120,486	2.3
W-1104	1,310,448	26.7
W-1116	83,748	1.7
Total:	<u>2,471,754</u>	<u>50.3</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>2,471,754</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 02-01-2013

Self-Monitoring Report
LLNL Treatment Facility C (TFC)
AREA TFC

1. Reporting Period: Business Month February Year 2013

2. Dates (in **bold** and underline) treated ground water was discharged

February 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28

Total monthly time facility operated (hours): 681

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 02-04-2013
Influent pH: 7.0
Effluent pH: 7.5
Effluent Temperature (°C): 17.9

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-701	463,720	11.8
W-1015	156,344	4.0
W-1102	128,244	3.7
W-1103	105,963	2.6
W-1104	1,068,352	26.8
W-1116	71,563	1.8
Total:	<u>1,994,186</u>	<u>50.7</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>1,994,186</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 03-01-2013

**Self-Monitoring Report
LLNL Treatment Facility C (TFC)
AREA TFC**

1. Reporting Period: Business Month March Year 2013

2. Dates (in **bold** and underline) treated ground water was discharged

March **01** **02** **03** **04** **05** **06** **07** **08** **09** **10** **11** **12** **13** **14** **15**
16 **17** **18** **19** **20** **21** **22** **23** **24** **25** **26** **27** **28** **29**

Total monthly time facility operated (hours): **705**

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): **03-04-2013**
Influent pH: **7.0**
Effluent pH: **7.5**
Effluent Temperature (°C): **18.2**

4. Wellfield Data:

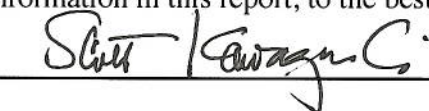
<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-701	568,024	13.5
W-1015	148,508	3.8
W-1102	137,216	3.5
W-1103	112,093	2.7
W-1104	1,098,224	26.4
W-1116	74,183	1.8
Total:	<u>2,138,248</u>	<u>51.7</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>2,138,248</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **04-05-2013**

**Land Observation Report date:
TFC-R003 - Arroyo Las Positas**

1. Reporting Period: Business Month January Year 2013

2. Date compliance sampling performed 01-07-2013

3. Weather Conditions:

Average air tempertaure (°C):	<u>5.38</u>
6-day total precipitation (in):	<u>0.34</u>
Average wind speed/direction (mph):	<u>2/ SE</u>

4. Receiving Data:

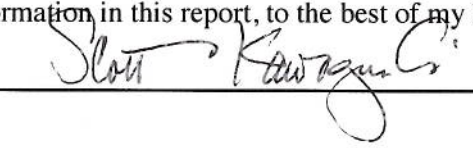
Sample		
<u>Location</u>	<u>pH</u>	<u>Temperature (C)</u>
<u>Receiving Water</u>	<u>7.5</u>	<u>7.7</u>

5. Land Observations, as "Yes" or "No", for reporting month:

<u>Visual Observations</u>	<u>Effluent</u>	<u>Receiving Water</u>
Floating and Suspended Materials of Waste Origin	<u>No</u>	<u>No</u>
Odor	<u>No</u>	<u>No</u>
Discoloration and Turbidity	Not Required	<u>No</u>
Evidence of Beneficial Water Use	Not Required	<u>No</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 02-08-2013

**Land Observation Report date:
TFC-R003 - Arroyo Las Positas**

1. Reporting Period: Business Month February Year 2013

2. Date compliance sampling performed 02-04-2013

3. Weather Conditions:

Average air tempertaure (°C):	<u>9.79</u>
6-day total precipitation (in):	<u>0.01</u>
Average wind speed/direction (mph):	<u>3/ SE</u>

4. Receiving Data:

Sample		
<u>Location</u>	<u>pH</u>	<u>Temperature (C)</u>
<u>Receiving Water</u>	<u>N/M</u>	<u>N/M</u>

5. Land Observations, as "Yes" or "No", for reporting month:

<u>Visual Observations</u>	<u>Effluent</u>	<u>Receiving Water</u>
Floating and Suspended Materials of Waste Origin	<u>No</u>	<u>No</u>
Odor	<u>No</u>	<u>No</u>
Discoloration and Turbidity	Not Required	<u>No</u>
Evidence of Beneficial Water Use	Not Required	<u>No</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Steve Kawaga C. Date: 03-12-2013

**Land Observation Report date:
TFC-R003 - Arroyo Las Positas**

1. Reporting Period: Business Month March Year 2013

2. Date compliance sampling performed 03-04-2013

3. Weather Conditions:

Average air tempertaure (°C):	<u>11.72</u>
6-day total precipitation (in):	<u>0.00</u>
Average wind speed/direction (mph):	<u>3/ SSE</u>

4. Receiving Data:

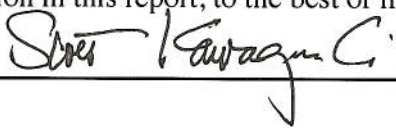
Sample		
<u>Location</u>	<u>pH</u>	<u>Temperature (C)</u>
<u>Receiving Water</u>	<u>N/M</u>	<u>N/M</u>

5. Land Observations, as "Yes" or "No", for reporting month:

<u>Visual Observations</u>	<u>Effluent</u>	<u>Receiving Water</u>
Floating and Suspended Materials of Waste Origin	<u>No</u>	<u>No</u>
Odor	<u>No</u>	<u>No</u>
Discoloration and Turbidity	Not Required	<u>No</u>
Evidence of Beneficial Water Use	Not Required	<u>No</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 04-05-2013

Self-Monitoring Report
LLNL Mini Treatment Unit 1 (MTU1)
AREA TFC-E

1. Reporting Period: Business Month January Year 2013

2. Dates (in **bold** and underline) treated ground water was discharged

December	29	30	31																
January	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15				
	16	17	18	19	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>	<u>31</u>			

Total monthly time facility operated (hours): 259

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>01-22-2013</u>
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.5</u>
Effluent Temperature (°C):	<u>22.4</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-368	35,162	2.5
W-413	229,239	14.6
Total:	<u>264,401</u>	<u>17.1</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>264,401</u>

6. Comments:

Facility was down waiting for new resin.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 02-11-2013

Self-Monitoring Report
LLNL Mini Treatment Unit 1 (MTU1)
AREA TFC-E

1. Reporting Period: Business Month February Year 2013

2. Dates (in **bold** and underline) treated ground water was discharged

February 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28

Total monthly time facility operated (hours): 641

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 02-01-2013
Influent pH: 7.0
Effluent pH: 7.5
Effluent Temperature (°C): 19.4

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-368	93,608	2.1
W-413	560,038	14.6
Total:	<u>653,646</u>	<u>16.7</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>653,646</u>

6. Comments:

Facility was down most of the day on 2/21 and restarted on 2/22 at 10:30 a.m. to change out carbon canister number two.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: *ant Vrdyay* Date: 03-05-2013

Self-Monitoring Report
LLNL Mini Treatment Unit 1 (MTU1)
AREA TFC-E

1. Reporting Period: Business Month March Year 2013

2. Dates (in **bold** and underline) treated ground water was discharged

March 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28

Total monthly time facility operated (hours): 513

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 03-07-2013
Influent pH: 7.0
Effluent pH: 7.5
Effluent Temperature (°C): 19.9

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-368	76,346	2.0
W-413	392,777	16.4
Total:	<u>469,123</u>	<u>18.4</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>469,123</u>

6. Comments:

Facility was down first five days of month pending Ion exchange resin columns.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 04-02-2013

Self-Monitoring Report
LLNL Portable Treatment Unit 1 (PTU1)
AREA TFC-SE

1. Reporting Period: Business Month January Year 2013

2. Dates (in **bold** and underline) treated ground water was discharged

December	<u>29</u>	<u>30</u>	<u>31</u>																
January	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>				
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>	<u>31</u>			

Total monthly time facility operated (hours): 826

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>01-07-2013</u>
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.5</u>
Effluent Temperature (°C):	<u>21.1</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1213	196,713	4.1
W-2201	585,874	12.1
Total:	<u>782,587</u>	<u>16.2</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>782,587</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Shirley Kawaguchi Date: 02-01-2013

Self-Monitoring Report
LLNL Portable Treatment Unit 1 (PTU1)
AREA TFC-SE

1. Reporting Period: Business Month February Year 2013

2. Dates (in **bold** and underline) treated ground water was discharged

February 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28

Total monthly time facility operated (hours): 683

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 02-01-2013
Influent pH: 7.0
Effluent pH: 7.5
Effluent Temperature (°C): 20.3

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1213	161,009	4.1
W-2201	482,042	12.1
Total:	<u>643,051</u>	<u>16.2</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>643,051</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Steve Kawaguchi Date: 03-01-2013

Self-Monitoring Report
LLNL Portable Treatment Unit 1 (PTU1)
AREA TFC-SE

1. Reporting Period: Business Month March Year 2013

2. Dates (in **bold** and underline) treated ground water was discharged

March **01** **02** **03** **04** **05** **06** **07** **08** **09** **10** **11** **12** **13** **14** **15**
16 **17** **18** **19** **20** **21** **22** **23** **24** **25** **26** **27** **28** **29**

Total monthly time facility operated (hours): 705

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 03-04-2013
Influent pH: 7.0
Effluent pH: 7.5
Effluent Temperature (°C): 20.1

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1213	165,354	4.0
W-2201	498,061	12.0
Total:	<u>663,415</u>	<u>16.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>663,415</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Steve Kawaguchi Date: 04-05-2013

Self-Monitoring Report

LLNL Treatment Facility D (TFD)

AREA TFD

1. Reporting Period: Business Month January Year 2013

2. Dates (in **bold** and underline) treated ground water was discharged

December	<u>29</u>	<u>30</u>	<u>31</u>																	
January	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>					
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>	<u>31</u>				

Total monthly time facility operated (hours): 761

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>01-02-2013</u>
Influent pH:	<u>7.5</u>
Effluent pH:	<u>7.5</u>
Effluent Temperature (°C):	<u>19.4</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-351	51,742	1.1
W-653	4,366	3.0
W-906	16	0.0
W-907-2	470,390	10.4
W-2011	10,679	3.0
W-2101	8,368	3.0
W-2102	14,983	3.0
W-1206	551,918	12.2
W-1208	920,578	20.2
Total:	<u>2,033,040</u>	<u>55.9</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>2,033,040</u>
<u>TFD irrigation supply</u>	<u>TFD-IRR</u>	<u>0</u>

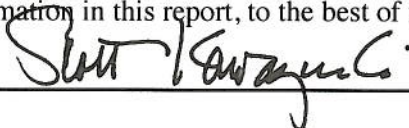
6. Comments:

Facility down on 1-10-13 due to high air stripper level. Restarted on 1-11-13.
 Facility down on 1-18-13 due to high air stripper level. Restarted on 1-18-13.
 Facility down on 1-21-13 due to high stripper level. Restarted on 1-22-13. Facility

Self-Monitoring Report (cont'd)
LLNL Treatment Facility D (TFD)
AREA TFD

down on 1-23-13 due to high stripper level. Restarted on 1-23-13. Facility down
on 1-27-13 due to high stripper level. Restarted on 1-28-13.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 02-01-2013

Self-Monitoring Report LLNL Treatment Facility D (TFD) AREA TFD

1. Reporting Period: Business Month February Year 2013

2. Dates (in **bold** and underline) treated ground water was discharged

February 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28

Total monthly time facility operated (hours): 680

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 02-04-2013
Influent pH: 7.5
Effluent pH: 7.5
Effluent Temperature (°C): 18.9

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-351	45,964	1.1
W-653	4,032	3.0
W-906	39	0.0
W-907-2	408,226	10.2
W-2011	9,686	3.0
W-2101	8,056	3.0
W-2102	15,532	3.0
W-1206	494,720	12.4
W-1208	824,786	20.3
Total:	<u>1,811,041</u>	<u>56.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>1,811,041</u>
<u>TFD irrigation supply</u>	<u>TFD-IRR</u>	<u>0</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Self-Monitoring Report (cont'd)
LLNL Treatment Facility D (TFD)
AREA TFD

Operator Signature:  Date: 03-01-2013

Self-Monitoring Report

LLNL Treatment Facility D (TFD)

AREA TFD

1. Reporting Period: Business Month March Year 2013

2. Dates (in **bold** and underline) treated ground water was discharged

March	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	

Total monthly time facility operated (hours): 703

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>03-01-2013</u>
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.5</u>
Effluent Temperature (°C):	<u>20.3</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-351	49,490	1.1
W-653	3,799	3.0
W-906	0	0.0
W-907-2	417,986	9.9
W-2011	8,868	3.0
W-2101	7,967	3.0
W-2102	15,424	3.0
W-1206	506,419	12.2
W-1208	853,976	20.5
 Total:	 <u>1,863,929</u>	 <u>55.7</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>1,863,929</u>
<u>TFD irrigation supply</u>	<u>TFD-IRR</u>	<u>0</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Self-Monitoring Report (cont'd)
LLNL Treatment Facility D (TFD)
AREA TFD

Operator Signature:  Date: **04-05-2013**

Self-Monitoring Report
LLNL Portable Treatment Unit 8 (PTU8)
AREA TFD-E

1. Reporting Period: Business Month January Year 2013

2. Dates (in **bold** and underline) treated ground water was discharged

December 29 30 31
January 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Total monthly time facility operated (hours): 816

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 01-03-2013
Influent pH: 7.0
Effluent pH: 7.5
Effluent Temperature (°C): 17.5

4. Wellfield Data:

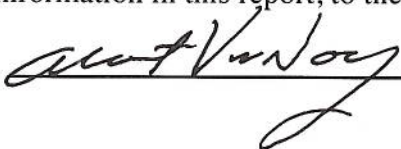
<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-2006	862	0.0
W-1301	50,691	0.0
W-1303	89,469	1.8
W-1306	19,837	0.4
W-1307	346,922	6.9
W-1550	34,041	0.7
W-2203	15,033	0.2
Total:	<u>556,855</u>	<u>10.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>556,855</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 02-11-2013

Self-Monitoring Report
LLNL Portable Treatment Unit 8 (PTU8)
AREA TFD-E

1. Reporting Period: Business Month February Year 2013

2. Dates (in **bold** and underline) treated ground water was discharged

February 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28

Total monthly time facility operated (hours): 672

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 02-04-2013
Influent pH: 7.0
Effluent pH: 7.5
Effluent Temperature (°C): 18.3

4. Wellfield Data:

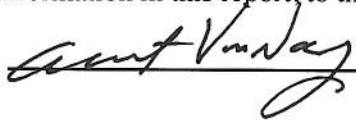
<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-2006	859	0.0
W-1301	29,872	0.7
W-1303	71,134	1.8
W-1306	15,189	0.3
W-1307	244,386	6.2
W-1550	26,277	0.6
W-2203	11,602	0.2
Total:	<u>399,319</u>	<u>9.8</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>399,319</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 03-05-2013

Self-Monitoring Report
LLNL Portable Treatment Unit 8 (PTU8)
AREA TFD-E

1. Reporting Period: Business Month March Year 2013

2. Dates (in **bold** and underline) treated ground water was discharged

March **01** 02 03 **04** **05** **06** **07** **08** **09** **10** **11** **12** **13** **14** **15**
16 **17** **18** **19** **20** **21** **22** **23** **24** **25** **26** **27** **28**

Total monthly time facility operated (hours): **562**

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): **03-05-2013**
Influent pH: **7.0**
Effluent pH: **7.5**
Effluent Temperature (°C): **20.5**

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-2203	9,595	0.3
W-2006	751	2.2
W-1301	26,797	2.4
W-1303	61,598	3.6
W-1306	12,366	0.4
W-1307	200,978	7.4
W-1550	21,455	0.6
Total:	<u>333,540</u>	<u>16.9</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>333,540</u>

6. Comments:

Facility was down on 3/2 and 3/3 due to discharge pump control issues.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **04-02-2013**

Self-Monitoring Report
LLNL Portable Treatment Unit 10 (PTU10)
AREA TFD-HPD

1. Reporting Period: Business Month January Year 2013

2. Dates (in **bold** and underline) treated ground water was discharged

December 29 30 31
January 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Total monthly time facility operated (hours): 825

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 01-10-2013
Influent pH: 7.5
Effluent pH: 7.5
Effluent Temperature (°C): 17.3

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1254	296,599	6.0
Total:	<u>296,599</u>	<u>6.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>296,599</u>

6. Comments:
NA

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Billy Kidd Date: 02-15-2013

Self-Monitoring Report
LLNL Portable Treatment Unit 10 (PTU10)
AREA TFD-HPD

1. Reporting Period: Business Month February Year 2013

2. Dates (in **bold** and underline) treated ground water was discharged

February 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28

Total monthly time facility operated (hours): 678

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 02-12-2013
Influent pH: 7.5
Effluent pH: 7.5
Effluent Temperature (°C): 14.1

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1254	173,546	4.0
Total:	<u>173,546</u>	<u>4.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>173,546</u>

6. Comments:
NA

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Billy Kudva Date: 03-05-2013

Self-Monitoring Report
LLNL Portable Treatment Unit 10 (PTU10)
AREA TFD-HPD

1. Reporting Period: Business Month March Year 2013

2. Dates (in **bold** and underline) treated ground water was discharged

March **01** **02** **03** **04** **05** **06** **07** **08** **09** **10** **11** **12** **13** **14** **15**
 16 **17** **18** **19** **20** **21** **22** **23** **24** **25** **26** **27** **28** **29**

Total monthly time facility operated (hours): 703

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 03-06-2013
Influent pH: 7.5
Effluent pH: 7.5
Effluent Temperature (°C): 17.7

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1254	203,012	4.9
Total:	<u>203,012</u>	<u>4.9</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>203,012</u>

6. Comments:
NA

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Billy Kuhl Date: 04-08-2013

**Self-Monitoring Report
LLNL ISB01 (ISB01)
AREA TFD-HPD**

1. Reporting Period: Business Month January Year 2013

2. Dates (in **bold** and underline) treated ground water was discharged

December	28	29	30	31																	
January	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15						
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31					

Total monthly time facility operated (hours): 346

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1650	528	4.2
W-1653	139	3.2
W-1655	11	2.7
W-1657	1	1.0
Total:	<u>679</u>	<u>11.1</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>ISB01 injection well</u>	<u>W-1552</u>	<u>679</u>

6. Comments:

Compliance sampling is not required at this facility due to the fact that ISB01 is a closed loop system, and water is not discharged to the environment. Water was circulated through the system, but was not treated. The facility was down for 13 days and a number of hours due to electrical problems with the flow meters at W-1653 and W-1655 and problems with the check valve at W-1653. The facility was also shut down to secure for freeze protection concerns.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Billy Kuld Date: 03-11-2013

**Self-Monitoring Report
LLNL ISB01 (ISB01)
AREA TFD-HPD**

1. Reporting Period: Business Month February Year 2013

2. Dates (in **bold** and underline) treated ground water was discharged

February 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28

Total monthly time facility operated (hours): 641

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1650	573	3.0
W-1653	385	1.8
W-1655	0	0.0
W-1657	0	0.0
Total:	<u>958</u>	<u>4.7</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>ISB01 injection well</u>	<u>W-1552</u>	<u>958</u>

6. Comments:

Compliance sampling is not required at this facility due to the fact that ISB01 is a closed loop system, and water is not discharged to the environment. Water was circulated through the system, but was not treated. The facility shut down at 07:11 on 2-10-13 due to a system pressure switch activation and was restarted at 13:55 on 2-11-13.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Billy Kuhl Date: 03-12-2013

**Self-Monitoring Report
LLNL ISB01 (ISB01)
AREA TFD-HPD**

1. Reporting Period: Business Month March Year 2013

2. Dates (in **bold** and underline) treated ground water was discharged

March 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28 29

Total monthly time facility operated (hours): 696

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1650	519	3.9
W-1653	333	2.6
W-1655	67	0.2
W-1657	0	0.0
Total:	<u>919</u>	<u>6.7</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>ISB01 injection well</u>	<u>W-1552</u>	<u>919</u>

6. Comments:

Compliance sampling is not required at this facility due to the fact that ISB01 is a closed loop system, and water is not discharged to the environment. Water was circulated through the system, but was not treated. On 3-27-13 approximately 170.96 gallons of facility water were diverted to the premixing tote and not injected into W-1552. This process took approximately 5.1 hours to complete.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Billy Kidd Date: 04-17-2013

Self-Monitoring Report
LLNL Portable Treatment Unit 2 (PTU2)
AREA TFD-S

1. Reporting Period: Business Month January Year 2013

2. Dates (in **bold** and underline) treated ground water was discharged

December	29	30	31																
January	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15				
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31			

Total monthly time facility operated (hours): 55

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>01-03-2013</u>
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.0</u>
Effluent Temperature (°C):	<u>21.7</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1503	33,848	11.5
W-1504	24,266	7.6
W-1510	14,726	4.9
Total:	<u>72,840</u>	<u>23.9</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>72,840</u>

6. Comments:

System secure from 12/29/12 to 1/3/13 and from 1/4/13 to 1/30/13 for discharge pump trouble shooting, repairs and modifications.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 02-01-2013

Self-Monitoring Report
LLNL Portable Treatment Unit 2 (PTU2)
AREA TFD-S

1. Reporting Period: Business Month February Year 2013

2. Dates (in **bold** and underline) treated ground water was discharged

February 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28

Total monthly time facility operated (hours): 676

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 02-07-2013
Influent pH: 7.0
Effluent pH: 7.0
Effluent Temperature (°C): 21.8

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1503	390,968	9.8
W-1504	304,758	7.6
W-1510	189,328	4.6
Total:	<u>885,054</u>	<u>22.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>885,054</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 03-01-2013

Self-Monitoring Report
LLNL Portable Treatment Unit 2 (PTU2)
AREA TFD-S

1. Reporting Period: Business Month March Year 2013

2. Dates (in **bold** and underline) treated ground water was discharged

March 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28 29

Total monthly time facility operated (hours): 693

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 03-11-2013
Influent pH: 7.0
Effluent pH: 7.5
Effluent Temperature (°C): 24.5

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1503	385,424	9.6
W-1504	315,164	7.8
W-1510	206,115	5.0
Total:	<u>906,703</u>	<u>22.3</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>906,703</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 04-16-2013

Self-Monitoring Report
LLNL Portable Treatment Unit 11 (PTU11)
AREA TFD-SE

1. Reporting Period: Business Month January Year 2013

2. Dates (in **bold** and underline) treated ground water was discharged

December 29 30 31
January 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Total monthly time facility operated (hours): 745

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 01-03-2013
Influent pH: 7.0
Effluent pH: 7.5
Effluent Temperature (°C): 16.6

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-314	373,991	5.4
W-2005	45,364	1.7
W-1308	53,740	2.1
W-1403	47,165	1.3
W-1904	0	0.0
SIP-ETC-201	0	0.0
Total:	<u>520,260</u>	<u>10.5</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>520,260</u>

6. Comments:

Facility secured 1/12 and 1/13 to prepare for well field testing.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 02-11-2013

Self-Monitoring Report
LLNL Portable Treatment Unit 11 (PTU11)
AREA TFD-SE

1. Reporting Period: Business Month February Year 2013

2. Dates (in **bold** and underline) treated ground water was discharged

February 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28

Total monthly time facility operated (hours): 672

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 02-04-2013
Influent pH: 7.0
Effluent pH: 7.5
Effluent Temperature (°C): 19.2

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-314	345,317	9.0
W-2005	52,251	1.3
W-1308	89,344	2.3
W-1403	45,075	1.2
W-1904	0	0.0
SIP-ETC-201	0	0.0
Total:	<u>531,987</u>	<u>13.8</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>531,987</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 03-05-2013

Self-Monitoring Report

LLNL Portable Treatment Unit 11 (PTU11)

AREA TFD-SE

1. Reporting Period: Business Month March Year 2013

2. Dates (in **bold** and underline) treated ground water was discharged

March **01** 02 03 **04** **05** **06** **07** **08** **09** **10** **11** **12** **13** **14** **15**
16 **17** **18** **19** **20** **21** **22** **23** **24** **25** **26** **27** **28**

Total monthly time facility operated (hours): **602**

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): **03-05-2013**
Influent pH: **7.0**
Effluent pH: **7.5**
Effluent Temperature (°C): **20**

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-314	295,954	9.7
W-2005	46,953	1.8
W-1308	75,090	2.3
W-1403	41,321	1.5
W-1904	0	0.0
SIP-ETC-201	0	0.0
Total:	<u>459,318</u>	<u>15.3</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>459,318</u>

6. Comments:

Facility was down on 3/2 and 3/3 due to a power outage.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **04-02-2013**

Self-Monitoring Report

LLNL Portable Treatment Unit 12 (PTU12)

AREA TFD-SS

1. Reporting Period: Business Month January Year 2013

2. Dates (in **bold** and underline) treated ground water was discharged

December	<u>29</u>	<u>30</u>	<u>31</u>																													
January	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>																	
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>	<u>31</u>																

Total monthly time facility operated (hours): 831

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>01-03-2013</u>
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.0</u>
Effluent Temperature (°C):	<u>20.7</u>

4. Wellfield Data:

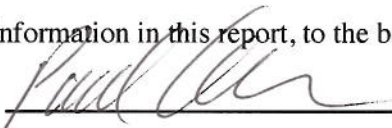
<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1523	334,323	6.7
W-1601	51,397	1.0
W-1602	193,884	3.9
W-1603	664,786	13.5
<hr/>		
Total:	<u>1,244,390</u>	<u>25.1</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>1,244,390</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 02-01-2013

Self-Monitoring Report
LLNL Portable Treatment Unit 12 (PTU12)
AREA TFD-SS

1. Reporting Period: Business Month February Year 2013

2. Dates (in **bold** and underline) treated ground water was discharged

February **01** **02** **03** **04** **05** **06** **07** **08** **09** **10** **11** **12** **13** **14** **15**
 16 **17** **18** **19** **20** **21** **22** **23** **24** **25** **26** **27** **28**

Total monthly time facility operated (hours): **676**

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): **02-08-2013**
Influent pH: **7.0**
Effluent pH: **7.0**
Effluent Temperature (°C): **20.6**

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1523	264,672	6.7
W-1601	41,823	1.1
W-1602	157,981	4.0
W-1603	529,699	13.2
Total:	<u>994,175</u>	<u>24.9</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>994,175</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **03-01-2013**

Self-Monitoring Report

LLNL Portable Treatment Unit 12 (PTU12)

AREA TFD-SS

1. Reporting Period: Business Month March Year 2013

2. Dates (in **bold** and underline) treated ground water was discharged

March 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28 29

Total monthly time facility operated (hours): 667

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 03-11-2013
 Influent pH: 7.0
 Effluent pH: 7.0
 Effluent Temperature (°C): 21.2

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1523	248,293	6.3
W-1601	40,278	1.1
W-1602	130,504	3.8
W-1603	519,875	13.0
Total:	<u>938,950</u>	<u>24.1</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>938,950</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 03-29-2013

Self-Monitoring Report
LLNL Portable Treatment Unit 6 (PTU6)
AREA TFD-W

1. Reporting Period: Business Month January Year 2013

2. Dates (in **bold** and underline) treated ground water was discharged

December 29 30 31
January 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Total monthly time facility operated (hours): 830

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 01-08-2013
Influent pH: 7.5
Effluent pH: 7.5
Effluent Temperature (°C): 19.9

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1215	503,209	10.2
W-1216	495,647	10.0
W-1902	887,854	18.1
Total:	<u>1,886,710</u>	<u>38.3</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>1,886,710</u>

6. Comments:

NA

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Billy Kridel Date: 02-15-2013

Self-Monitoring Report
LLNL Portable Treatment Unit 6 (PTU6)
AREA TFD-W

1. Reporting Period: Business Month February Year 2013

2. Dates (in **bold** and underline) treated ground water was discharged

February 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28

Total monthly time facility operated (hours): 675

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 02-12-2013
Influent pH: 7.5
Effluent pH: 7.5
Effluent Temperature (°C): 20.4

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1215	405,334	10.1
W-1216	404,178	10.0
W-1902	720,536	18.0
Total:	<u>1,530,048</u>	<u>38.1</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>1,530,048</u>

6. Comments:

NA

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Billy Kuhl Date: 03-05-2013

Self-Monitoring Report
LLNL Portable Treatment Unit 6 (PTU6)
AREA TFD-W

1. Reporting Period: Business Month March Year 2013

2. Dates (in **bold** and underline) treated ground water was discharged

March 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28 29

Total monthly time facility operated (hours): 681

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 03-06-2013
Influent pH: 7.5
Effluent pH: 7.5
Effluent Temperature (°C): 19.2

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1215	405,295	10.0
W-1216	406,519	10.0
W-1902	726,025	18.1
Total:	<u>1,537,839</u>	<u>38.1</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>1,537,839</u>

6. Comments:

The facility was shut down at 1328 on 3-14-13 to change out the cuno filter elements. The facility was restarted at 1015 on 3-15-13.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Billy Kula Date: 04-08-2013

Self-Monitoring Report

LLNL Vapor Extraction System 11 (VES11)

AREA VTFD-ETCS

1. Reporting Period: Business Month January Year 2013

2. Dates (in **bold** and underline) treatment facility operated

December	<u>28</u>	<u>29</u>	<u>30</u>	<u>31</u>																	
January	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>						
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>	<u>31</u>					

3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-1904	0	0.0	0	0	0
W-ETC-2003	908,982	15.4	-1.07	58	841
W-ETC-2004A	421,249	8.8	-7.08	58	841
W-ETC-2004B	1,303,131	27.3	-6.02	58	841
SIP-ETC-201	0	0.0	0	0	0
Total:	<u>2,633,362</u>	<u>51.5</u>			

4. Comments:

Due to efforts to optimize facility and wellfield operation, calculated monthly volume compared to facility flow rate entered on this report may not correlate.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 02-05-2013

Self-Monitoring Report

LLNL Vapor Extraction System 11 (VES11)

AREA VTFD-ETCS

1. Reporting Period: Business Month February Year 2013

2. Dates (in **bold** and underline) treatment facility operated

February 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28

3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-1904	76	0.0	0	0	0
W-ETC-2003	726,587	16.5	-1.43	58	686
W-ETC-2004A	415,895	10.4	-7.49	58	686
W-ETC-2004B	1,063,131	32.0	-7.53	58	686
SIP-ETC-201	21	0.0	0	0	0
Total:	<u>2,205,710</u>	<u>58.8</u>			

4. Comments:

Quarterly vapor samples were collected from active and idle extraction wells 2/11/13. Due to efforts to optimize facility and wellfield operation, calculated monthly volume compared to facility flow rates entered on this report may not correlate.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Sam Thomas Date: 03-04-2013

Self-Monitoring Report

LLNL Vapor Extraction System 11 (VES11)

AREA VTFD-ETCS

1. Reporting Period: Business Month March Year 2013

2. Dates (in **bold** and underline) treatment facility operated

March 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28 29

3. Wellfield Data:

<u>Source</u>	<u>Monthly</u> <u>Volume(cu. ft)</u>	<u>Instantaneous</u> <u>Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours</u> <u>of Op.</u>
W-1904	0	0.0	0	0	0
W-ETC-2003	776,232	18.5	-1.68	66	704
W-ETC-2004A	419,411	9.9	-7.86	66	704
W-ETC-2004B	875,844	20.3	-11.4	66	704
SIP-ETC-201	0	0.0	0	0	0
Total:	<u>2,071,487</u>	<u>48.7</u>			

4. Comments:

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Sam Thomas Date: 04-03-2013

Self-Monitoring Report

LLNL Vapor Extraction System 13 (VES13)

AREA VTFD-HS

1. Reporting Period: Business Month January Year 2013

2. Dates (in **bold** and underline) treatment facility operated

December	28	29	30	31																
January	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15					
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30					

3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-653	0	0.0	0	0	0
W-2011	0	0.0	0	0	0
W-2101	0	0.0	0	0	0
W-2102	0	0.0	0	0	0
Total:	<u>0</u>	<u>0.0</u>			

4. Comments:

System did not operate during this period.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 01-31-2013

Self-Monitoring Report

LLNL Vapor Extraction System 13 (VES13)

AREA VTFD-HS

1. Reporting Period: Business Month February Year 2013

2. Dates (in **bold** and underline) treatment facility operated

January	31														
February	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
	16	17	18	19	20	21	22	23	24	25	26	27	28		

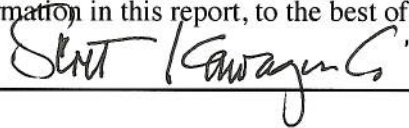
3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-653	0	0.0	0	0	0
W-2011	0	0.0	0	0	0
W-2101	0	0.0	0	0	0
W-2102	0	0.0	0	0	0
Total:	<u>0</u>	<u>0.0</u>			

4. Comments:

System did not operate during this period.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 03-01-2013

Self-Monitoring Report

LLNL Vapor Extraction System 13 (VES13)

AREA VTFD-HS

1. Reporting Period: Business Month March Year 2013

2. Dates (in **bold** and underline) treatment facility operated

March	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
	16	17	18	19	20	21	22	23	24	25	26	27	28		

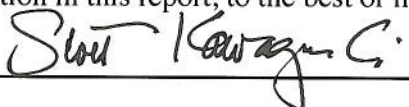
3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-653	0	0.0	0	0	0
W-2011	0	0.0	0	0	0
W-2101	0	0.0	0	0	0
W-2102	0	0.0	0	0	0
<hr/>					
Total:	<u>0</u>	<u>0.0</u>			

4. Comments:

System did not operate during this period.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 03-29-2013

Self-Monitoring Report

LLNL Portable Treatment Unit 3 (PTU3)

AREA TFE-E

1. Reporting Period: Business Month January Year 2013

2. Dates (in **bold** and underline) treated ground water was discharged

December	<u>28</u>	<u>29</u>	<u>30</u>	<u>31</u>																											
January	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>																
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>	<u>31</u>															

Total monthly time facility operated (hours): **850**

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>01-03-2013</u>
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.0</u>
Effluent Temperature (°C):	<u>19.4</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-566	423,002	8.4
W-1109	62,597	1.2
W-1903	34,605	0.8
W-1909	0	0.0
W-2305	0	0.0
 Total:	<u>520,204</u>	<u>10.4</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>520,204</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **02-05-2013**

Self-Monitoring Report
LLNL Portable Treatment Unit 3 (PTU3)
AREA TFE-E

1. Reporting Period: Business Month February Year 2013

2. Dates (in **bold** and underline) treated ground water was discharged

February 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28

Total monthly time facility operated (hours): 682

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 02-04-2013
Influent pH: 7.0
Effluent pH: 7.0
Effluent Temperature (°C): 19.3

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-566	336,375	8.4
W-1109	46,903	1.2
W-1903	25,399	0.7
W-1909	0	0.0
W-2305	0	0.0
Total:	<u>408,677</u>	<u>10.2</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>408,677</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 03-01-2013

Self-Monitoring Report

LLNL Portable Treatment Unit 3 (PTU3)

AREA TFE-E

1. Reporting Period: Business Month March Year 2013

2. Dates (in **bold** and underline) treated ground water was discharged

March **01** **02** **03** **04** **05** **06** **07** **08** **09** **10** **11** **12** **13** **14** **15**
 16 **17** **18** **19** **20** **21** **22** **23** **24** **25** **26** **27** **28** **29**

Total monthly time facility operated (hours): **709**

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): **03-04-2013**
 Influent pH: **7.0**
 Effluent pH: **7.0**
 Effluent Temperature (°C): **21.6**

4. Wellfield Data:


<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-566	350,429	8.3
W-1109	46,589	1.1
W-1903	22,141	0.5
W-1909	0	0.0
W-2305	37	0.0
Total:	<u>419,196</u>	<u>9.9</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>419,196</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **04-03-2013**

Self-Monitoring Report
LLNL GAC Treatment Unit 07 (GTU07)
AREA TFE-HS

1. Reporting Period: Business Month January Year 2013

2. Dates (in **bold** and underline) treated ground water was discharged

December	19	20	21	22	23	24	25	26	27	28	29	30	31			
January	01	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	10	11	12	13	14	<u>15</u>	
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>	<u>31</u>

Total monthly time facility operated (hours): **555**

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>01-16-2013</u>
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.0</u>
Effluent Temperature (°C):	<u>7.3</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-2105	628	0.7
Total:	<u>628</u>	<u>0.7</u>


5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>628</u>

6. Comments:

Facility secured 12/18/12 to 1/2/13, and 1/10 to 1/15/13 for freeze protection. W-2105 utilizes vacuum-enhanced groundwater extraction combined with cyclic pump operation. Therefore constant flow rate and hours of operation may not correspond.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **02-13-2013**

Self-Monitoring Report
LLNL GAC Treatment Unit 07 (GTU07)
AREA TFE-HS

1. Reporting Period: Business Month February Year 2013

2. Dates (in **bold** and underline) treated ground water was discharged

February 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28

Total monthly time facility operated (hours): 674

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 02-04-2013
Influent pH: 7.0
Effluent pH: 7.0
Effluent Temperature (°C): 17.7

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-2105	697	0.6
Total:	<u>697</u>	<u>0.6</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>697</u>

6. Comments:

W-2105 utilizes vacuum-enhanced groundwater extraction combined with cyclic pump operation. Therefore constant flow rate and hours of operation may not correspond.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Sam Thomas Date: 03-06-2013

Self-Monitoring Report
LLNL GAC Treatment Unit 07 (GTU07)
AREA TFE-HS

1. Reporting Period: Business Month March Year 2013

2. Dates (in **bold** and underline) treated ground water was discharged

March **01** **02** **03** **04** **05** **06** **07** **08** **09** **10** **11** **12** **13** **14** **15**
16 **17** **18** **19** **20** **21** **22** **23** **24** **25** **26** **27** **28** **29**

Total monthly time facility operated (hours): **685**

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): **03-01-2013**
Influent pH: **7.0**
Effluent pH: **7.0**
Effluent Temperature (°C): **9.8**

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-2105	773	1.0
Total:	<u>773</u>	<u>1.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>773</u>

6. Comments:

Facility secured 3/6 at 14:12 in preparation for monthly sample collection.
Facility was restarted 3/7 at 07:15 hrs. W-2105 utilizes vacuum-enhanced groundwater extraction combined with cyclic pump operation. Therefore constant flow rate and hours of operation may not correspond.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: *Sam Thomas* Date: **04-03-2013**

Operator Signature: [Signature] Date: **02-01-2013**

Self-Monitoring Report
LLNL Portable Treatment Unit 9 (PTU9)
AREA TFE-NW

1. Reporting Period: Business Month February Year 2013

2. Dates (in **bold** and underline) treated ground water was discharged

February 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28

Total monthly time facility operated (hours): 681

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 02-07-2013

Influent pH: 7.0

Effluent pH: 7.0

Effluent Temperature (°C): 21.8

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1211	273,897	6.9
W-1409	59,990	1.5
Total:	<u>333,887</u>	<u>8.4</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>333,887</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 03-01-2013

Self-Monitoring Report
LLNL Portable Treatment Unit 9 (PTU9)
AREA TFE-NW

1. Reporting Period: Business Month March Year 2013

2. Dates (in **bold** and underline) treated ground water was discharged

March 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28 29

Total monthly time facility operated (hours): 697

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 03-11-2013
Influent pH: 7.0
Effluent pH: 7.5
Effluent Temperature (°C): 22.4

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1211	276,899	6.7
W-1409	61,297	1.5
Total:	<u>338,196</u>	<u>8.2</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>338,196</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 03-29-2013

Self-Monitoring Report
LLNL Mini Treatment Unit 04 (MTU04)
AREA TFE-SE

1. Reporting Period: Business Month January Year 2013

2. Dates (in **bold** and underline) treated ground water was discharged

December	<u>28</u>	<u>29</u>	<u>30</u>	<u>31</u>															
January	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>				
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>	<u>31</u>			

Total monthly time facility operated (hours): 838

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>01-03-2013</u>
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.0</u>
Effluent Temperature (°C):	<u>19.7</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-359	420,475	8.3
Total:	<u>420,475</u>	<u>8.3</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>420,475</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Sam Thomas Date: 02-05-2013

Self-Monitoring Report
LLNL Mini Treatment Unit 04 (MTU04)
AREA TFE-SE

1. Reporting Period: Business Month February Year 2013

2. Dates (in **bold** and underline) treated ground water was discharged

February 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28

Total monthly time facility operated (hours): 670

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 02-04-2013
Influent pH: 7.0
Effluent pH: 7.0
Effluent Temperature (°C): 20.3

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-359	333,770	8.3
Total:	<u>333,770</u>	<u>8.3</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>333,770</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Sam Thomas Date: 03-01-2013

Self-Monitoring Report
LLNL Mini Treatment Unit 04 (MTU04)
AREA TFE-SE

1. Reporting Period: Business Month March Year 2013

2. Dates (in **bold** and underline) treated ground water was discharged

March **01** **02** **03** **04** **05** **06** **07** **08** **09** **10** **11** **12** **13** **14** **15**
16 **17** **18** **19** **20** **21** **22** **23** **24** **25** **26** **27** **28** **29**

Total monthly time facility operated (hours): **640**

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): **03-04-2013**
Influent pH: **7.0**
Effluent pH: **7.0**
Effluent Temperature (°C): **20.5**

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-359	319,815	8.2
Total:	<u>319,815</u>	<u>8.2</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>319,815</u>

6. Comments:

Facility shutdown 3/10/13 @ 13:31, cause of shutdown unknown. Facility was restarted 3/11/13 at 08:15.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: *Sam Thomas* Date: **04-04-2013**

Self-Monitoring Report

LLNL Mini Treatment Unit 03 (MTU03)

AREA TFE-SW

1. Reporting Period: Business Month January Year 2013

2. Dates (in **bold** and underline) treated ground water was discharged

December	<u>28</u>	<u>29</u>	<u>30</u>	<u>31</u>																											
January	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	05	06	07	08	09	10	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>																
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>	<u>31</u>															

Total monthly time facility operated (hours): **643**

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>01-14-2013</u>
Influent pH:	<u>7.5</u>
Effluent pH:	<u>7.5</u>
Effluent Temperature (°C):	<u>12.2</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1518	21,450	0.5
W-1520	28	1.2
W-1522	44	1.7
W-1516	4,428	18.0
Total:	<u>25,950</u>	<u>21.4</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>25,950</u>

6. Comments:

The facility was shut down at 13:30 on 1-4-13 to perform maintenance work on blower. The facility was restarted at 10:22 on 1-11-13. W-1522 was disconnected and W-1516 was connected to the W-1522 line on the skid. The facility was shut down at 08:18 on 1-16-13 for the electrical hookup of W-1516. The facility was restarted at 08:14 on 1-17-13. Startup of W-1516 for Shakedown Test for Step Flow Test at 13:18 on 1-17-13. The facility was shut down at 09:57 on 1-18-13 to make repairs to the facility. The facility was restarted at 15:04 on 1-18-13. The facility was shut down at 15:49 on 1-31-13 to allow EE support to download new software strategy to the facility.

Self-Monitoring Report (cont'd)
LLNL Mini Treatment Unit 03 (MTU03)
AREA TFE-SW

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Billy Kidd Date: 02-21-2013

Self-Monitoring Report
LLNL Mini Treatment Unit 03 (MTU03)
AREA TFE-SW

1. Reporting Period: Business Month February Year 2013

2. Dates (in **bold** and underline) treated ground water was discharged

February 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28

Total monthly time facility operated (hours): 479

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 02-11-2013
Influent pH: 7.5
Effluent pH: 7.5
Effluent Temperature (°C): 19.3

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1516	281,438	10.0
W-1518	14,611	0.5
W-1520	0	0.0
W-1522	0	0.0
Total:	<u>296,049</u>	<u>10.5</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>296,049</u>

6. Comments:

The facility was down from 2-1-13 thru 2-3-13 so that new strategy could be downloaded. There was also other EE work that was performed. The facility was restarted at 14:47 on 2-4-13. The facility was shutdown at 16:33 on 2-15-13 so that the back flow regulator could be repaired. The facility was restarted at 07:45 on 2-19-13.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Billy Kuhl Date: 03-05-2013

Self-Monitoring Report
LLNL Mini Treatment Unit 03 (MTU03)
AREA TFE-SW

1. Reporting Period: Business Month March Year 2013

2. Dates (in **bold** and underline) treated ground water was discharged

March 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28 29

Total monthly time facility operated (hours): 687

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 03-06-2013
Influent pH: 7.4
Effluent pH: 7.5
Effluent Temperature (°C): 17.8

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1516	412,378	10.0
W-1518	20,892	0.5
W-1520	13,887	0.0
W-1522	0	0.0
Total:	<u>447,157</u>	<u>10.5</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>447,157</u>

6. Comments:

The startup of W-1520 at 1.0 gpm occurred at 09:10 on 3-19-13.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Billy Kivil Date: 05-14-2013

Self-Monitoring Report
LLNL Mini Treatment Unit 05 (MTU05)
AREA TFE-W

1. Reporting Period: Business Month January Year 2013

2. Dates (in **bold** and underline) treated ground water was discharged

December	<u>28</u>	<u>29</u>	<u>30</u>	<u>31</u>															
January	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>				
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>	<u>31</u>			

Total monthly time facility operated (hours): 595

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>01-09-2013</u>
Influent pH:	<u>7.5</u>
Effluent pH:	<u>7.5</u>
Effluent Temperature (°C):	<u>18.9</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-292	206,464	6.0
W-305	502,891	14.0
Total:	<u>709,355</u>	<u>20.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>709,355</u>

6. Comments:

The facility was shut down at 14:41 on 1-18-13 and restarted at 14:32 on 1-28-13 to change out the GACS and install a GAC water pumpout system. W-292 shut down at 13:25 on 1-30-13 due to low flow and was restarted at 14:28 on 1-31-13.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Billy Kridel Date: 02-15-2013

Self-Monitoring Report
LLNL Mini Treatment Unit 05 (MTU05)
AREA TFE-W

1. Reporting Period: Business Month February Year 2013

2. Dates (in **bold** and underline) treated ground water was discharged

February 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28

Total monthly time facility operated (hours): 666

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 02-11-2013
Influent pH: 7.5
Effluent pH: 7.5
Effluent Temperature (°C): 20.1

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-292	238,755	6.0
W-305	563,412	14.1
Total:	<u>802,167</u>	<u>20.1</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>802,167</u>

6. Comments:
NA

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Billy Kuhl Date: 03-05-2013

Self-Monitoring Report
LLNL Mini Treatment Unit 05 (MTU05)
AREA TFE-W

1. Reporting Period: Business Month March Year 2013

2. Dates (in **bold** and underline) treated ground water was discharged

March 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28 29

Total monthly time facility operated (hours): 690

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 03-06-2013
Influent pH: 7.5
Effluent pH: 7.5
Effluent Temperature (°C): 19.2

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-292	248,676	6.0
W-305	583,810	14.1
Total:	<u>832,486</u>	<u>20.1</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>832,486</u>

6. Comments:
NA

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Billy Kuntz Date: 04-08-2013

Self-Monitoring Report

LLNL Vapor Extraction System 16 (VES16)

AREA VTFF-ELM

1. Reporting Period: Business Month January Year 2013

2. Dates (in **bold** and underline) treatment facility operated

December	<u>28</u>	<u>29</u>	<u>30</u>	<u>31</u>																	
January	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	06	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>						
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>	<u>31</u>					

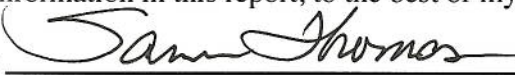
3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-1903	61,525	1.7	-18.2	68	787
W-1909	0	0.0	0	0	0
W-2305	0	0.0	0	0	0
W-543-001	0	0.0	0	0	0
W-543-003	973,508	22.3	-1.5	68	787
W-543-1908	0	0.0	0	0	0
Total:					
	<u>1,035,033</u>	<u>24.1</u>			

4. Comments:

Facility shutdown 1/4/13 at 12:20 as TER 01/W-2305 water heater temperature exceeded heating coil limit. Facility was restarted at 14:15. Facility shutdown 1/5/13 at 20:08 hrs. due to an unplanned power outage. Facility was restarted 1/7/13 at 13:05.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 02-06-2013

Self-Monitoring Report

LLNL Vapor Extraction System 16 (VES16)

AREA VTFF-ELM

1. Reporting Period: Business Month February Year 2013

2. Dates (in **bold** and underline) treatment facility operated

February 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28


3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-1903	65,514	1.9	-17.9	68	0
W-1909	0	0.0	0	0	0
W-2305	0	0.0	0	0	0
W-543-001	30	0.0	0	0	0
W-543-003	931,402	23.0	-1.5	68	673
W-543-1908	42	0.0	0	0	673
Total:	<u>996,988</u>	<u>24.8</u>			

4. Comments:

Quarterly vapor samples collected from active and idle extraction wells 2-12-13.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 03-04-2013

Self-Monitoring Report

LLNL Vapor Extraction System 16 (VES16)

AREA VTFF-ELM

1. Reporting Period: Business Month March Year 2013

2. Dates (in **bold** and underline) treatment facility operated

March 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28 29

3. Wellfield Data:

<u>Source</u>	<u>Monthly</u> <u>Volume(cu. ft)</u>	<u>Instantaneous</u> <u>Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours</u> <u>of Op.</u>
W-1903	69,120	1.6	-18.31	64	695
W-1909	0	0.0	0	0	0
W-2305	0	0.0	0	0	0
W-543-001	0	0.0	0	0	0
W-543-003	949,328	22.7	-1.5	64	695
W-543-1908	0	0.0	0	0	0
Total:	<u>1,018,448</u>	<u>24.3</u>			

4. Comments:

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Sam Thomas Date: 04-03-2013

Self-Monitoring Report

LLNL Vapor Extraction System 12 (VES12)

AREA VTFE-HS

1. Reporting Period: Business Month January Year 2013

2. Dates (in **bold** and underline) treatment facility operated

December	<u>28</u>	<u>29</u>	<u>30</u>	<u>31</u>																	
January	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	06	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>						
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>	<u>31</u>					

3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-2105	86,508	1.9	-13.3	54	802
W-ETS-2008A	37	0.0	0	0	0
W-ETS-2008B	924,195	17.5	-12.68	54	802
W-ETS-2009	43	0.0	0	0	0
W-ETS-2010A	28	0.0	0	0	0
W-ETS-2010B	29	0.0	0	0	0
Total:	<u>1,010,840</u>	<u>19.4</u>			

4. Comments:

Found facility shutdown as a result of an unplanned power outage that occurred 1/5/13 at 20:06 hrs. Facility was restarted 1/7/13 at 11:07. Facility experienced several shutdowns for 15 minutes or less during reporting month to remove condensate from facility separator. Quarterly wellhead samples were collected 1/22/13.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 02-05-2013

Self-Monitoring Report

LLNL Vapor Extraction System 12 (VES12)

AREA VTFE-HS

1. Reporting Period: Business Month February Year 2013

2. Dates (in **bold** and underline) treatment facility operated

February 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28


3. Wellfield Data:

<u>Source</u>	<u>Monthly</u> <u>Volume(cu. ft)</u>	<u>Instantaneous</u> <u>Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours</u> <u>of Op.</u>
W-2105	71,310	2.0	-14.46	62	586
W-ETS-2008A	0	0.0	0	0	0
W-ETS-2008B	672,626	18.2	-13.77	62	586
W-ETS-2009	0	0.0	0	0	0
W-ETS-2010A	0	0.0	0	0	0
W-ETS-2010B	0	0.0	0	0	0
Total:	<u>743,936</u>	<u>20.2</u>			

4. Comments:

Facility secured 2/7/13 at 09:07 to perform modifications to facility piping.
 Facility was restarted 2/11/13 at 07:15 hrs.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 03-11-2013

Self-Monitoring Report

LLNL Vapor Extraction System 12 (VES12)

AREA VTFE-HS

1. Reporting Period: Business Month March Year 2013

2. Dates (in **bold** and underline) treatment facility operated

March **01** **02** 03 **04** **05** **06** **07** **08** **09** **10** **11** **12** **13** **14** **15**
 16 **17** **18** **19** **20** **21** **22** **23** **24** **25** **26** **27** **28** **29**

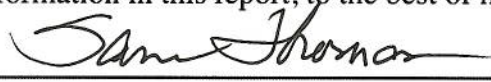
3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-2105	80,245	2.0	-14.79	62	654
W-ETS-2008A	0	0.0	0	0	0
W-ETS-2008B	736,790	19.3	-14	62	654
W-ETS-2009	0	0.0	0	0	0
W-ETS-2010A	0	0.0	0	0	0
W-ETS-2010B	0	0.0	0	0	0
Total:	<u>817,035</u>	<u>21.3</u>			

4. Comments:

Facility shutdown 3/2/13 at 09:08 hrs., cause of shutdown unknown. Facility was restarted 3/4/13 at 09:12.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 04-03-2013

Self-Monitoring Report

LLNL GAC Treatment Unit 01 (GTU01)

AREA TFG-1

1. Reporting Period: Business Month January Year 2013

2. Dates (in **bold** and underline) treated ground water was discharged

December	<u>29</u>	<u>30</u>	<u>31</u>																												
January	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>																
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>	<u>31</u>															

Total monthly time facility operated (hours): 808

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>01-07-2013</u>
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.0</u>
Effluent Temperature (°C):	<u>19.8</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1111	249,630	5.1
Total:	<u>249,630</u>	<u>5.1</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Seco</u>	<u>TFG-ASW</u>	<u>249,630</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 02-01-2013

Self-Monitoring Report
LLNL GAC Treatment Unit 01 (GTU01)
AREA TFG-1

1. Reporting Period: Business Month February Year 2013

2. Dates (in **bold** and underline) treated ground water was discharged

February 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28

Total monthly time facility operated (hours): 678

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 02-06-2013
Influent pH: 7.0
Effluent pH: 7.0
Effluent Temperature (°C): 19.7

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1111	204,816	5.1
Total:	<u>204,816</u>	<u>5.1</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Seco</u>	<u>TFG-ASW</u>	<u>204,816</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 03-01-2013

Self-Monitoring Report
LLNL GAC Treatment Unit 01 (GTU01)
AREA TFG-1

1. Reporting Period: Business Month March Year 2013

2. Dates (in **bold** and underline) treated ground water was discharged

March 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28 29

Total monthly time facility operated (hours): 685

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 03-11-2013
Influent pH: 7.0
Effluent pH: 7.0
Effluent Temperature (°C): 18.1

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1111	210,018	5.1
Total:	<u>210,018</u>	<u>5.1</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Seco</u>	<u>TFG-ASW</u>	<u>210,018</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 03-29-2013

**Land Observation Report date:
TFG-ASW - Arroyo Seco**

1. Reporting Period: Business Month January Year 2013

2. Date compliance sampling performed 01-07-2013

3. Weather Conditions:

Average air tempertaure (°C):	<u>5.38</u>
6-day total precipitation (in):	<u>0.34</u>
Average wind speed/direction (mph):	<u>2/ SE</u>

4. Receiving Data:

Sample		
<u>Location</u>	<u>pH</u>	<u>Temperature (C)</u>
<u>Receiving Water</u>	<u>7.0</u>	<u>19.4</u>

5. Land Observations, as "Yes" or "No", for reporting month:

<u>Visual Observations</u>	<u>Effluent</u>	<u>Receiving Water</u>
Floating and Suspended Materials of Waste Origin	<u>No</u>	<u>No</u>
Odor	<u>No</u>	<u>No</u>
Discoloration and Turbidity	Not Required	<u>No</u>
Evidence of Beneficial Water Use	Not Required	<u>N/A</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 02-20-2013

**Land Observation Report date:
TFG-ASW - Arroyo Seco**

1. Reporting Period: Business Month February Year 2013

2. Date compliance sampling performed 02-06-2013

3. Weather Conditions:

Average air tempertaure (°C):	<u>9.43</u>
6-day total precipitation (in):	<u>0.01</u>
Average wind speed/direction (mph):	<u>3/ SSE</u>

4. Receiving Data:

Sample		
<u>Location</u>	<u>pH</u>	<u>Temperature (C)</u>
<u>Receiving Water</u>	<u>N/M</u>	<u>N/M</u>

5. Land Observations, as "Yes" or "No", for reporting month:

<u>Visual Observations</u>	<u>Effluent</u>	<u>Receiving Water</u>
Floating and Suspended Materials of Waste Origin	<u>No</u>	<u>No</u>
Odor	<u>No</u>	<u>No</u>
Discoloration and Turbidity	Not Required	<u>No</u>
Evidence of Beneficial Water Use	Not Required	<u>N/A</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 03-18-2013

**Land Observation Report date:
TFG-ASW - Arroyo Seco**

1. Reporting Period: Business Month March Year 2013

2. Date compliance sampling performed 03-11-2013

3. Weather Conditions:

Average air tempertaure (°C):	<u>10.22</u>
6-day total precipitation (in):	<u>0.14</u>
Average wind speed/direction (mph):	<u>5/ S</u>

4. Receiving Data:

Sample		
<u>Location</u>	<u>pH</u>	<u>Temperature (C)</u>
<u>Receiving Water</u>	<u>N/M</u>	<u>N/M</u>

5. Land Observations, as "Yes" or "No", for reporting month:

<u>Visual Observations</u>	<u>Effluent</u>	<u>Receiving Water</u>
Floating and Suspended Materials of Waste Origin	<u>No</u>	<u>No</u>
Odor	<u>No</u>	<u>No</u>
Discoloration and Turbidity	Not Required	<u>No</u>
Evidence of Beneficial Water Use	Not Required	<u>N/A</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 04-08-2013

Self-Monitoring Report
LLNL Mini Treatment Unit 02 (MTU02)
AREA TFG-N

1. Reporting Period: Business Month January Year 2013

2. Dates (in **bold** and underline) treated ground water was discharged

December 29 30 31
January 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Total monthly time facility operated (hours): 788

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 12-29-2012
Influent pH: 7.0
Effluent pH: 7.0
Effluent Temperature (°C): 20

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1806	89,515	1.9
W-1807	193,720	4.2
Total:	<u>283,235</u>	<u>6.0</u>

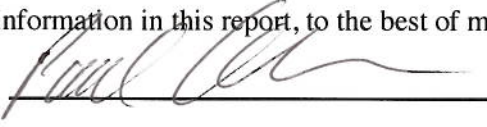
5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>283,235</u>

6. Comments:

System shut down on 12/31/12 due to carbon vessel condensate back pressure.
System restarted 1/2/13.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 02-01-2013

Self-Monitoring Report
LLNL Mini Treatment Unit 02 (MTU02)
AREA TFG-N

1. Reporting Period: Business Month February Year 2013

2. Dates (in **bold** and underline) treated ground water was discharged

February 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28

Total monthly time facility operated (hours): 678

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 02-07-2013
Influent pH: 7.0
Effluent pH: 7.0
Effluent Temperature (°C): 20.9

4. Wellfield Data:

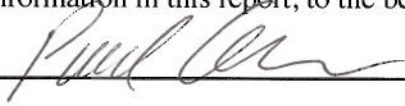
<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1806	75,209	1.9
W-1807	164,143	4.1
Total:	<u>239,352</u>	<u>6.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>239,352</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 03-01-2013

Self-Monitoring Report

LLNL Mini Treatment Unit 02 (MTU02)

AREA TFG-N

1. Reporting Period: Business Month March Year 2013

2. Dates (in **bold** and underline) treated ground water was discharged

March 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28 29

Total monthly time facility operated (hours): 694

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 03-11-2013
 Influent pH: 7.0
 Effluent pH: 7.5
 Effluent Temperature (°C): 16.9

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1806	77,205	1.9
W-1807	168,327	4.0
Total:	<u>245,532</u>	<u>5.9</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>245,532</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 03-29-2013

Self-Monitoring Report
LLNL Portable Treatment Unit 5 (PTU5)
AREA TF406

1. Reporting Period: Business Month January Year 2013

2. Dates (in **bold** and underline) treated ground water was discharged

December	<u>29</u>	<u>30</u>	<u>31</u>																												
January	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>																
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>	<u>31</u>															

Total monthly time facility operated (hours): 830

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>01-08-2013</u>
Influent pH:	<u>7.5</u>
Effluent pH:	<u>7.5</u>
Effluent Temperature (°C):	<u>21.1</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1309	101	4.5
W-1310	487,916	10.0
Total:	<u>488,017</u>	<u>14.5</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>488,017</u>

6. Comments:

NA

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Billy K. Smith Date: 02-15-2013

Self-Monitoring Report
LLNL Portable Treatment Unit 5 (PTU5)
AREA TF406

1. Reporting Period: Business Month February Year 2013

2. Dates (in **bold** and underline) treated ground water was discharged

February 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28

Total monthly time facility operated (hours): 675

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 02-11-2013
Influent pH: 7.5
Effluent pH: 7.5
Effluent Temperature (°C): 20.1

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1309	0	0.0
W-1310	395,358	9.9
Total:	<u>395,358</u>	<u>9.9</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>395,358</u>

6. Comments:

Vapor GAC# 2 was replaced at 15:30 on 2-26-13.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Billy Kuhl Date: 03-05-2013

Self-Monitoring Report
LLNL Portable Treatment Unit 5 (PTU5)
AREA TF406

1. Reporting Period: Business Month March Year 2013

2. Dates (in **bold** and underline) treated ground water was discharged

March 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28 29

Total monthly time facility operated (hours): 701

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 03-06-2013
Influent pH: 7.5
Effluent pH: 7.5
Effluent Temperature (°C): 20.9

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1309	0	0.0
W-1310	416,691	10.0
Total:	<u>416,691</u>	<u>10.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>416,691</u>

6. Comments:
NA

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Billy Kudr Date: 04-08-2013

Self-Monitoring Report
LLNL GAC Treatment Unit 03 (GTU03)
AREA TF406-NW

1. Reporting Period: Business Month January Year 2013

2. Dates (in **bold** and underline) treated ground water was discharged

December	<u>29</u>	<u>30</u>	<u>31</u>																												
January	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>																
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>	<u>31</u>															

Total monthly time facility operated (hours): 816

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>01-07-2013</u>
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.0</u>
Effluent Temperature (°C):	<u>32</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1801	198,021	3.8
Total:	<u>198,021</u>	<u>3.8</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>198,021</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 02-01-2013

Self-Monitoring Report
LLNL GAC Treatment Unit 03 (GTU03)
AREA TF406-NW

1. Reporting Period: Business Month February Year 2013

2. Dates (in **bold** and underline) treated ground water was discharged

February 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28

Total monthly time facility operated (hours): 670

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 02-06-2013
Influent pH: 7.0
Effluent pH: 7.0
Effluent Temperature (°C): 23.3

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1801	165,979	4.2
Total:	<u>165,979</u>	<u>4.2</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>165,979</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 03-01-2013

Self-Monitoring Report
LLNL GAC Treatment Unit 03 (GTU03)
AREA TF406-NW

1. Reporting Period: Business Month March Year 2013

2. Dates (in **bold** and underline) treated ground water was discharged

March 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28 29

Total monthly time facility operated (hours): 686

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 03-11-2013
Influent pH: 7.0
Effluent pH: 7.0
Effluent Temperature (°C): 26.6

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1801	166,329	3.8
Total:	<u>166,329</u>	<u>3.8</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>166,329</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 03-29-2013

Self-Monitoring Report
LLNL Solar Treatment Unit 09 (STU09)
AREA TF518-N

1. Reporting Period: Business Month January Year 2013

2. Dates (in **bold** and underline) treated ground water was discharged

December	28	29	30	31															
January	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15				
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30				

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1410	0	0.0
Total:	<u>0</u>	<u>0.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>0</u>

6. Comments:

This treatment facility was shut down on 2-20-08 due to elevated tritium activities in the facility influent. The facility will be restarted once a solution for mixed waste generation is implemented.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **01-31-2013**

Self-Monitoring Report
LLNL Solar Treatment Unit 09 (STU09)
AREA TF518-N

1. Reporting Period: Business Month February Year 2013

2. Dates (in **bold** and underline) treated ground water was discharged

January	31														
February	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
	16	17	18	19	20	21	22	23	24	25	26	27	28		

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1410	0	0.0
Total:	<u>0</u>	<u>0.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>0</u>

6. Comments:

This treatment facility was shut down on 2-20-08 due to elevated tritium activities in the facility influent. The facility will be restarted once a solution for mixed waste generation is implemented.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Shirley Kawaguchi Date: 03-01-2013

Self-Monitoring Report
LLNL Solar Treatment Unit 09 (STU09)
AREA TF518-N

1. Reporting Period: Business Month March Year 2013

2. Dates (in **bold** and underline) treated ground water was discharged

March	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
	16	17	18	19	20	21	22	23	24	25	26	27	28		

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1410	0	0.0
Total:	<u>0</u>	<u>0.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>0</u>

6. Comments:

This treatment facility was shut down on 2-20-08 due to elevated tritium activities in the facility influent. The facility will be restarted once a solution for mixed waste generation is implemented.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Steve Kawaguchi Date: 03-29-2013

Self-Monitoring Report

LLNL Treatment Facility 518-HDTANK (TF518-HDTANK)

AREA TF518-PZ

1. Reporting Period: Business Month January Year 2013

2. Dates (in **bold** and underline) treated ground water was discharged

December	22	23	24	25	26	27	28	29	30	31										
January	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15					
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31				

Total monthly time facility operated (hours): 578

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1615	107	0.0
W-518-1913	0	0.0
W-518-1914	0	0.0
W-518-1915	83	0.0
SVB-518-201	0	0.0
SVB-518-204	0	0.0
 Total:	<hr/> 190	<hr/> 0.0

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>West Perimeter Drainage Channel</u>	<u>TFB-R002</u>	<u>190</u>

6. Comments:

Facility secured 12/21/12 to 1/2/13, and from 1/10/13 to 1/15/13 for freeze protection. Transferred 647 gallons of groundwater from this facility to TFB main for treatment.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Sam Humer Date: 02-05-2013

Self-Monitoring Report
LLNL Treatment Facility 518-HDTANK (TF518-HDTANK)
AREA TF518-PZ

1. Reporting Period: Business Month February Year 2013

2. Dates (in **bold** and underline) treated ground water was discharged

February **01** **02** **03** **04** **05** **06** **07** **08** **09** **10** **11** **12** **13** **14** **15**
 16 **17** **18** **19** **20** **21** **22** **23** **24** **25** **26** **27** **28**

Total monthly time facility operated (hours): **674**

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): **Not Measured**

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1615	131	0.0
W-518-1913	0	0.0
W-518-1914	0	0.0
W-518-1915	73	0.0
SVB-518-201	0	0.0
SVB-518-204	0	0.0
Total:	<u>204</u>	<u>0.0</u>


5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>West Perimeter Drainage Channel</u>	<u>TFB-R002</u>	<u>204</u>

6. Comments:

Water compliance sampling at this facility is not required as the water is transferred to TFB Main and treated there.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **03-04-2013**

Self-Monitoring Report

LLNL Treatment Facility 518-HDTANK (TF518-HDTANK)

AREA TF518-PZ

1. Reporting Period: Business Month March Year 2013

2. Dates (in **bold** and underline) treated ground water was discharged

March 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28 29

Total monthly time facility operated (hours): 693

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1615	116	0.0
W-518-1913	0	0.0
W-518-1914	0	0.0
W-518-1915	67	0.0
SVB-518-201	0	0.0
SVB-518-204	0	0.0
Total:	<u>183</u>	<u>0.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>West Perimeter Drainage Channel</u>	<u>TFB-R002</u>	<u>184</u>

6. Comments:

Water compliance sampling is not performed at this facility, water is transferred to and treated at TFB Main.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 04-03-2013

Self-Monitoring Report
LLNL Catalytic Reductive Dehalogenation 1 (CRD1)
AREA TF5475-1

1. Reporting Period: Business Month January Year 2013

2. Dates (in **bold** and underline) treated ground water was discharged

December	29	30	31																
January	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15				
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31			

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1302-2	0	0.0
Total:	<u>0</u>	<u>0.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>CRD-1 injection</u>	<u>W-1302-1</u>	<u>0</u>

6. Comments:

The treatment facility was shut down on 7/27/07. The facility will be restarted once a solution for mixed waste generation is implemented.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Billy Kistler Date: 02-15-2013

Self-Monitoring Report
LLNL Catalytic Reductive Dehalogenation 1 (CRD1)
AREA TF5475-1

1. Reporting Period: Business Month February Year 2013

2. Dates (in **bold** and underline) treated ground water was discharged

February 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1302-2	0	0.0
Total:	<u>0</u>	<u>0.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>CRD-1 injection</u>	<u>W-1302-1</u>	<u>0</u>

6. Comments:

The treatment facility was shut down on 7/27/07. The facility will be restarted once a solution for mixed waste generation is implemented.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Billy Kudva Date: 03-05-2013

Self-Monitoring Report
LLNL Catalytic Reductive Dehalogenation 1 (CRD1)
AREA TF5475-1

1. Reporting Period: Business Month March Year 2013

2. Dates (in **bold** and underline) treated ground water was discharged

March	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1302-2	0	0.0
Total:	<u>0</u>	<u>0.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>CRD-1 injection</u>	<u>W-1302-1</u>	<u>0</u>

6. Comments:

The treatment facility was shut down on 7/27/07. The facility will be restarted once a solution for mixed waste generation is implemented.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Billy Kuida Date: 04-08-2013

Self-Monitoring Report

LLNL GAC Treatment Unit 09 (GTU09)

AREA TF5475-2

1. Reporting Period: Business Month January Year 2013

2. Dates (in **bold** and underline) treated ground water was discharged

December	<u>29</u>	<u>30</u>	<u>31</u>																												
January	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>																
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>	<u>31</u>															

Total monthly time facility operated (hours): 827

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>01-07-2013</u>
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.0</u>
Effluent Temperature (°C):	<u>16.9</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1108	112,740	2.3
W-1415	0	0.0
Total:	<u>112,740</u>	<u>2.3</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>112,740</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 02-11-2013

Self-Monitoring Report
LLNL GAC Treatment Unit 09 (GTU09)
AREA TF5475-2

1. Reporting Period: Business Month February Year 2013

2. Dates (in **bold** and underline) treated ground water was discharged

February 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28

Total monthly time facility operated (hours): 681

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 02-04-2013
Influent pH: 7.0
Effluent pH: 7.0
Effluent Temperature (°C): 17.3

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1108	60,606	1.9
W-1415	0	0.0
Total:	<u>60,606</u>	<u>1.9</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>60,606</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 03-05-2013

Self-Monitoring Report
LLNL GAC Treatment Unit 09 (GTU09)
AREA TF5475-2

1. Reporting Period: Business Month March Year 2013

2. Dates (in **bold** and underline) treated ground water was discharged

March 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28

Total monthly time facility operated (hours): 689

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 03-05-2013
Influent pH: 7.0
Effluent pH: 7.0
Effluent Temperature (°C): 18.8

4. Wellfield Data:

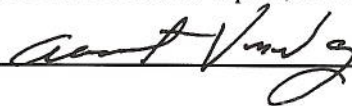
<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1108	46,945	0.8
W-1415	0	0.0
Total:	<u>46,945</u>	<u>0.8</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>46,945</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 04-02-2013

Self-Monitoring Report
LLNL Catalytic Reductive Dehalogenation 2 (CRD2)
AREA TF5475-3

1. Reporting Period: Business Month January Year 2013

2. Dates (in **bold** and underline) treated ground water was discharged

December	29	30	31																
January	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15				
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31			

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1604	0	0.0
W-1605	0	0.0
W-1608	0	0.0
W-1609	0	0.0
Total:	<u>0</u>	<u>0.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>CRD-2 injection</u>	<u>W-1610</u>	<u>0</u>

6. Comments:

The treatment facility was shut down on 8/31/07. The facility will be restarted once a solution for mixed waste generation is implemented.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Billy Kordil Date: 02-15-2013

Self-Monitoring Report
LLNL Catalytic Reductive Dehalogenation 2 (CRD2)
AREA TF5475-3

1. Reporting Period: Business Month February Year 2013

2. Dates (in **bold** and underline) treated ground water was discharged

February 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1604	0	0.0
W-1605	0	0.0
W-1608	0	0.0
W-1609	0	0.0
Total:	<u>0</u>	<u>0.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>CRD-2 injection</u>	<u>W-1610</u>	<u>0</u>

6. Comments:

The treatment facility was shut down on 8/31/07. The facility will be restarted once a solution for mixed waste generation is implemented.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Billy Kuhl Date: 03-05-2013

Self-Monitoring Report
LLNL Catalytic Reductive Dehalogenation 2 (CRD2)
AREA TF5475-3

1. Reporting Period: Business Month March Year 2013

2. Dates (in **bold** and underline) treated ground water was discharged

March	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1604	0	0.0
W-1605	0	0.0
W-1608	0	0.0
W-1609	0	0.0
Total:	<u>0</u>	<u>0.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>CRD-2 injection</u>	<u>W-1610</u>	<u>0</u>

6. Comments:

The treatment facility was shut down on 8/31/07. The facility will be restarted once a solution for mixed waste generation is implemented.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Billy Lusk Date: 04-08-2013

Self-Monitoring Report

LLNL Vapor Extraction System 08 (VES08)

AREA VTF406-HS

1. Reporting Period: Business Month January Year 2013

2. Dates (in **bold** and underline) treatment facility operated

December	<u>28</u>	<u>29</u>	<u>30</u>	<u>31</u>																	
January	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>						
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>	<u>31</u>					

3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-217	667,860	13.7	-2.67	60	848
W-514-2007A	0	0.0	0	0	0
W-514-2007B	471,129	9.6	-2.94	60	848
Total:					
	<u>1,138,989</u>	<u>23.3</u>			

4. Comments:

End month volumes for extraction wells were calculated from individual flow measurements, and not derived from facility totalizer values.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 02-11-2013

Self-Monitoring Report

LLNL Vapor Extraction System 08 (VES08)

AREA VTF406-HS

1. Reporting Period: Business Month February Year 2013

2. Dates (in **bold** and underline) treatment facility operated

February 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28

3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-217	511,253	13.0	-2.69	65	691
W-514-2007A	0	0.0	0	0	0
W-514-2007B	351,081	8.8	-2.46	65	691
Total:	<u>862,334</u>	<u>21.8</u>			

4. Comments:

End month volumes for extraction wells were calculated from individual flow measurements, and not derived from facility totalizer values.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 03-11-2013

Self-Monitoring Report

LLNL Vapor Extraction System 08 (VES08)

AREA VTF406-HS

1. Reporting Period: Business Month March Year 2013

2. Dates (in **bold** and underline) treatment facility operated

March **01** **02** **03** **04** **05** **06** **07** **08** **09** **10** **11** **12** **13** **14** **15**
 16 **17** **18** **19** **20** **21** **22** **23** **24** **25** **26** **27** **28** **29**

3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-217	562,233	13.0	-2.44	63	689
W-514-2007A	0	0.0	0	0	0
W-514-2007B	398,650	8.6	-2.66	63	689
Total:	<u>960,883</u>	<u>21.6</u>			

4. Comments:

Facility secured 3/20 at 10:46 hrs to replace lead carbon filter. Facility was restarted at 14:15 hrs. End month volumes and hours of operation for extraction wells were calculated from individual flow measurements, and not derived from facility totalizer values

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 04-08-2013

Self-Monitoring Report

LLNL Vapor Extraction System 05 (VES05)

AREA VTF511

1. Reporting Period: Business Month January Year 2013

2. Dates (in **bold** and underline) treatment facility operated

December	<u>28</u>	<u>29</u>	<u>30</u>	<u>31</u>																	
January	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>						
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>	<u>31</u>					

3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-2204	0	0.0	0	0	0
W-2205	0	0.0	0	0	0
W-2206	0	0.0	0	0	0
W-2207A	0	0.0	0	0	0
W-2207B	192,441	6.1	-6	48	163
W-2208A	0	0.0	0	0	0
W-2208B	218,902	4.4	-5	48	163
Total:	<u>411,343</u>	<u>10.6</u>			

4. Comments:

Due to condensate intermittently disrupting operation of facility instrumentation, extraction well end month cumulative volumes entered for reporting month may not be accurate.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 02-01-2013

Self-Monitoring Report

LLNL Vapor Extraction System 05 (VES05)

AREA VTF511

1. Reporting Period: Business Month February Year 2013

2. Dates (in **bold** and underline) treatment facility operated

February 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28

3. Wellfield Data:

<u>Source</u>	<u>Monthly</u> <u>Volume(cu. ft)</u>	<u>Instantaneous</u> <u>Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours</u> <u>of Op.</u>
W-2204	0	0.0	0	0	0
W-2205	0	0.0	0	0	0
W-2206	0	0.0	0	0	0
W-2207A	38	0.0	0	0	0
W-2207B	176,952	3.7	-5.7	54	0
W-2208A	97	0.0	0	0	669
W-2208B	247,654	5.5	-5	54	669
Total:	<u>424,741</u>	<u>9.2</u>			

4. Comments:

Quarterly vapor samples collected from idle extraction wells W-2207A and W-2208A, and active wells W-2207B and W-2208B on 2/20/13. Facility secured 2/20/13 at 09:38 to evacuate water from extraction well pipeline sumps. Facility was restarted at 11:30. Due to condensate intermittently disrupting operation of facility instrumentation, extraction well end month cumulative volumes entered for reporting month may not be accurate.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Sam Thomas Date: 03-04-2013

Self-Monitoring Report

LLNL Vapor Extraction System 05 (VES05)

AREA VTF511

1. Reporting Period: Business Month March Year 2013

2. Dates (in **bold** and underline) treatment facility operated

March 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28 29

3. Wellfield Data:

<u>Source</u>	<u>Monthly</u> <u>Volume(cu. ft)</u>	<u>Instantaneous</u> <u>Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours</u> <u>of Op.</u>
W-2204	0	0.0	0	0	0
W-2205	0	0.0	0	0	0
W-2206	0	0.0	0	0	0
W-2207A	0	0.0	0	0	0
W-2207B	170,851	6.1	-5	62	564
W-2208A	0	0.0	0	0	0
W-2208B	257,808	7.5	-4.2	62	564
Total:	<u>428,659</u>	<u>13.6</u>			

4. Comments:

Facility shutdown 3/9/12 and was restarted 3/11/12 at 08:28, shutdown at 09:02 hrs. and restarted at 13:55. Cause of shutdown was not determined. Facility was discovered shutdown 3/12/13, EE personnel was unable to diagnose problem. Facility was restarted 3/13/13 at 13:37 hrs. Facility discovered shutdown 3/25/13, cause of shutdown unknown. Facility was restarted at 08:18 hrs. Due to condensate intermittently disrupting operation of facility instrumentation, extraction well end month cumulative volumes entered for reporting month may not be accurate.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 04-04-2013

Self-Monitoring Report
LLNL Vapor Extraction System 19 (VES19)
AREA VTF518-PZ

1. Reporting Period: Business Month January Week: 1 Year 2013

2. Dates (in **bold** and underline) treatment facility operated

December 29 30 31
January 01 **02** **03** **04**

3. Wellfield Data:

<u>Source</u>	<u>Weekly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-1615	10,818	3.7	-19.5	45	49
W-518-1913	0	0.0	0	0	0
W-518-1914	0	0.0	0	0	0
W-518-1915	2,047	0.7	-22	45	49
SVB-518-201	0	0.0	0	0	0
SVB-518-204	0	0.0	0	0	0
Total:	<u>12,865</u>	<u>4.4</u>			

4. Comments:

Facility was secured 12/21/12 to 1/2/13 for freeze protection.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Sam Shon Date: **02-06-2013**

Self-Monitoring Report
LLNL Vapor Extraction System 19 (VES19)
AREA VTF518-PZ

1. Reporting Period: Business Month January **Week: 2** Year **2013**

2. Dates (in **bold** and underline) treatment facility operated

January **05** **06** **07** **08** **09** **10** **11**

3. Wellfield Data:

<u>Source</u>	<u>Weekly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-1615	37,196	3.7	-19.5	30	168
W-518-1913	0	0.0	0	0	0
W-518-1914	0	0.0	0	0	0
W-518-1915	7,037	0.7	-22	30	168
SVB-518-201	0	0.0	0	0	0
SVB-518-204	0	0.0	0	0	0
Total:	<u>44,233</u>	<u>4.4</u>			

4. Comments:

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 02-06-2013

Self-Monitoring Report
LLNL Vapor Extraction System 19 (VES19)
AREA VTF518-PZ

1. Reporting Period: Business Month January **Week: 3** Year **2013**

2. Dates (in **bold** and underline) treatment facility operated

January **12** **13** **14** **15** **16** **17** **18**

3. Wellfield Data:

<u>Source</u>	<u>Weekly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-1615	37,201	3.7	-19.2	40	168
W-518-1913	0	0.0	0	0	0
W-518-1914	0	0.0	0	0	0
W-518-1915	7,038	0.7	-22	40	168
SVB-518-201	0	0.0	0	0	0
SVB-518-204	0	0.0	0	0	0
Total:	<u>44,239</u>	<u>4.4</u>			

4. Comments:

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 02-05-2013

Self-Monitoring Report
LLNL Vapor Extraction System 19 (VES19)
AREA VTF518-PZ

1. Reporting Period: Business Month January **Week: 4** Year **2013**

2. Dates (in **bold** and underline) treatment facility operated

January **19** **20** **21** **22** **23** **24** **25**

3. Wellfield Data:

<u>Source</u>	<u>Weekly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-1615	39,602	3.9	-19	50	169
W-518-1913	0	0.0	0	0	0
W-518-1914	0	0.0	0	0	0
W-518-1915	8,124	0.8	-21.5	50	169
SVB-518-201	0	0.0	0	0	0
SVB-518-204	0	0.0	0	0	0
Total:	<u>47,726</u>	<u>4.7</u>			

4. Comments:

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 02-05-2013

Self-Monitoring Report
LLNL Vapor Extraction System 19 (VES19)
AREA VTF518-PZ

1. Reporting Period: Business Month February Week: 1 Year 2013

2. Dates (in **bold** and underline) treatment facility operated


January **26** **27** **28** **29** **30** **31**
February **01**

3. Wellfield Data:

<u>Source</u>	<u>Weekly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-1615	38,019	3.8	-19	46	167
W-518-1913	0	0.0	0	0	0
W-518-1914	0	0.0	0	0	0
W-518-1915	7,004	0.7	-21.9	46	167
SVB-518-201	0	0.0	0	0	0
SVB-518-204	0	0.0	0	0	0
Total:	<u>45,023</u>	<u>4.5</u>			

4. Comments:

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 03-04-2013

Self-Monitoring Report
LLNL Vapor Extraction System 19 (VES19)
AREA VTF518-PZ

1. Reporting Period: Business Month February Week: 2 Year 2013

2. Dates (in **bold** and underline) treatment facility operated

February **02** **03** **04** **05** **06** **07** **08**

3. Wellfield Data:

<u>Source</u>	<u>Weekly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-1615	39,457	3.9	-18.9	38	169
W-518-1913	0	0.0	0	0	0
W-518-1914	0	0.0	0	0	0
W-518-1915	7,082	0.7	-21.9	38	169
SVB-518-201	0	0.0	0	0	0
SVB-518-204	0	0.0	0	0	0
Total:	<u>46,539</u>	<u>4.6</u>			

4. Comments:

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 03-04-2013

Self-Monitoring Report
LLNL Vapor Extraction System 19 (VES19)
AREA VTF518-PZ

1. Reporting Period: Business Month February Week: 3 Year 2013

2. Dates (in **bold** and underline) treatment facility operated

February **09** **10** **11** **12** **13** **14** **15**

3. Wellfield Data:

<u>Source</u>	<u>Weekly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-1615	38,167	3.8	-19	40	167
W-518-1913	0	0.0	0	0	0
W-518-1914	0	0.0	0	0	0
W-518-1915	8,035	0.8	-21.8	40	167
SVB-518-201	0	0.0	0	0	0
SVB-518-204	0	0.0	0	0	0
Total:	<u>46,202</u>	<u>4.6</u>			

4. Comments:

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 03-04-2013

Self-Monitoring Report
LLNL Vapor Extraction System 19 (VES19)
AREA VTF518-PZ

1. Reporting Period: Business Month February Week: 4 Year 2013

2. Dates (in **bold** and underline) treatment facility operated

February **16** **17** **18** **19** **20** **21** **22**

3. Wellfield Data:

<u>Source</u>	<u>Weekly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-1615	39,204	3.9	-19	32	168
W-518-1913	0	0.0	0	0	0
W-518-1914	0	0.0	0	0	0
W-518-1915	8,042	0.8	-21	32	168
SVB-518-201	0	0.0	0	0	0
SVB-518-204	0	0.0	0	0	0
Total:	<u>47,246</u>	<u>4.7</u>			

4. Comments:

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 03-04-2013

Self-Monitoring Report

LLNL Vapor Extraction System 19 (VES19)

AREA VTF518-PZ

1. Reporting Period: Business Month March Week: 1 Year 2013

2. Dates (in **bold** and underline) treatment facility operated

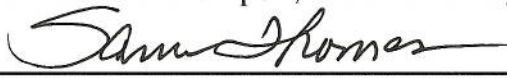
February **23** **24** **25** **26** **27** **28**
 March **01**

3. Wellfield Data:

<u>Source</u>	<u>Weekly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-1615	35,732	3.5	-18.8	58	170
W-518-1913	0	0.0	0	0	0
W-518-1914	0	0.0	0	0	0
W-518-1915	7,146	0.7	-21.5	58	170
SVB-518-201	0	0.0	0	0	0
SVB-518-204	0	0.0	0	0	0
Total:	<u>42,878</u>	<u>4.2</u>			

4. Comments:

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **04-03-2013**

Self-Monitoring Report

LLNL Vapor Extraction System 19 (VES19)

AREA VTF518-PZ

1. Reporting Period: Business Month March **Week: 2** Year **2013**

2. Dates (in **bold** and underline) treatment facility operated


March **02** **03** **04** **05** **06** **07** **08**

3. Wellfield Data:

<u>Source</u>	<u>Weekly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-1615	39,005	3.9	-18.5	44	167
W-518-1913	0	0.0	0	0	0
W-518-1914	0	0.0	0	0	0
W-518-1915	7,001	0.7	-21.5	44	167
SVB-518-201	0	0.0	0	0	0
SVB-518-204	0	0.0	0	0	0
Total:	<u>46,006</u>	<u>4.6</u>			

4. Comments:

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **04-03-2013**

Self-Monitoring Report

LLNL Vapor Extraction System 19 (VES19)

AREA VTF518-PZ

1. Reporting Period: Business Month March **Week: 3** Year **2013**

2. Dates (in **bold** and underline) treatment facility operated

March **09** **10** **11** **12** **13** **14** **15**

3. Wellfield Data:

<u>Source</u>	<u>Weekly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-1615	38,973	3.9	-18.8	44	167
W-518-1913	0	0.0	0	0	0
W-518-1914	0	0.0	0	0	0
W-518-1915	6,995	0.7	-21.5	44	167
SVB-518-201	0	0.0	0	0	0
SVB-518-204	0	0.0	0	0	0
Total:	<u>45,968</u>	<u>4.6</u>			

4. Comments:

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Sam Thomas Date: 04-03-2013

Self-Monitoring Report

LLNL Vapor Extraction System 19 (VES19)

AREA VTF518-PZ

1. Reporting Period: Business Month March Week: 4 Year 2013

2. Dates (in **bold** and underline) treatment facility operated

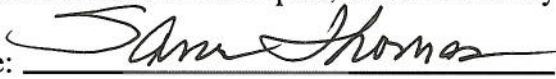
March **16** **17** **18** **19** **20** **21** **22**

3. Wellfield Data:

<u>Source</u>	<u>Weekly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-1615	41,818	4.1	-18.5	52	170
W-518-1913	0	0.0	0	0	0
W-518-1914	0	0.0	0	0	0
W-518-1915	7,140	0.7	-21.5	52	170
SVB-518-201	0	0.0	0	0	0
SVB-518-204	0	0.0	0	0	0
Total:	<u>48,958</u>	<u>4.8</u>			

4. Comments:

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 04-03-2013

Self-Monitoring Report

LLNL Vapor Extraction System 19 (VES19)

AREA VTF518-PZ

1. Reporting Period: Business Month March **Week: 5** Year **2013**

2. Dates (in **bold** and underline) treatment facility operated

March **23** **24** **25** **26** **27** **28** **29**

3. Wellfield Data:

<u>Source</u>	<u>Weekly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-1615	38,898	3.9	-18.7	53	166
W-518-1913	0	0.0	0	0	0
W-518-1914	0	0.0	0	0	0
W-518-1915	6,982	0.7	-21.5	53	166
SVB-518-201	0	0.0	0	0	0
SVB-518-204	0	0.0	0	0	0
Total:	<u>45,880</u>	<u>4.6</u>			

4. Comments:

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 04-03-2013

Self-Monitoring Report

LLNL Vapor Extraction System 01 (VES01)

AREA VTF5475

1. Reporting Period: Business Month January Year 2013

2. Dates (in **bold** and underline) treatment facility operated

December	29	30	31																		
January	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15						
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31					

3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-ETS-507	0	0.0	0	0	0
W-1605	0	0.0	0	0	0
W-1608	0	0.0	0	0	0
W-2211	0	0.0	0	0	0
W-2212	0	0.0	0	0	0
W-2302	0	0.0	0	0	0
SVI-ETS-504	0	0.0	0	0	0
W-2303	0	0.0	0	0	0
<hr/>					
Total:	<u>0</u>	<u>0.0</u>			

4. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>VTF5475 Vapor Injection Well</u>	<u>SVI-ETS-505</u>	<u>0</u>

5. Comments:

This treatment facility was shut down on 10-12-07 due to a FY2008 funding reduction. The facility will be restarted once a solution for mixed waste generation is implemented.

6. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Billy Kuhl Date: 02-15-2013

Self-Monitoring Report

LLNL Vapor Extraction System 01 (VES01)

AREA VTF5475

1. Reporting Period: Business Month February Year 2013

2. Dates (in **bold** and underline) treatment facility operated

February 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28

3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-ETS-507	0	0.0	0	0	0
W-1605	0	0.0	0	0	0
W-1608	0	0.0	0	0	0
W-2211	0	0.0	0	0	0
W-2212	0	0.0	0	0	0
W-2302	0	0.0	0	0	0
W-2303	0	0.0	0	0	0
SVI-ETS-504	0	0.0	0	0	0
Total:	<u>0</u>	<u>0.0</u>			

4. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>VTF5475 Vapor Injection Well</u>	<u>SVI-ETS-505</u>	<u>0</u>

5. Comments:

This treatment facility was shut down on 10-12-07 due to a FY2008 funding reduction. The facility will be restarted once a solution for mixed waste generation is implemented.

6. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Billy Kuhl Date: 03-05-2013

Self-Monitoring Report

LLNL Vapor Extraction System 01 (VES01)

AREA VTF5475

1. Reporting Period: Business Month March Year 2013

2. Dates (in **bold** and underline) treatment facility operated

March 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28 29

3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-ETS-507	0	0.0	0	0	0
W-1605	0	0.0	0	0	0
W-1608	0	0.0	0	0	0
W-2211	0	0.0	0	0	0
W-2212	0	0.0	0	0	0
W-2302	0	0.0	0	0	0
W-2303	0	0.0	0	0	0
SVI-ETS-504	0	0.0	0	0	0
Total:	<u>0</u>	<u>0.0</u>			

4. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>VTF5475 Vapor Injection Well</u>	<u>SVI-ETS-505</u>	<u>0</u>

5. Comments:

This treatment facility was shut down on 10-12-07 due to a FY2008 funding reduction. The facility will be restarted once a solution for mixed waste generation is implemented.

6. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Billy Kuhl Date: 04-08-2013

Attachment C

Figures

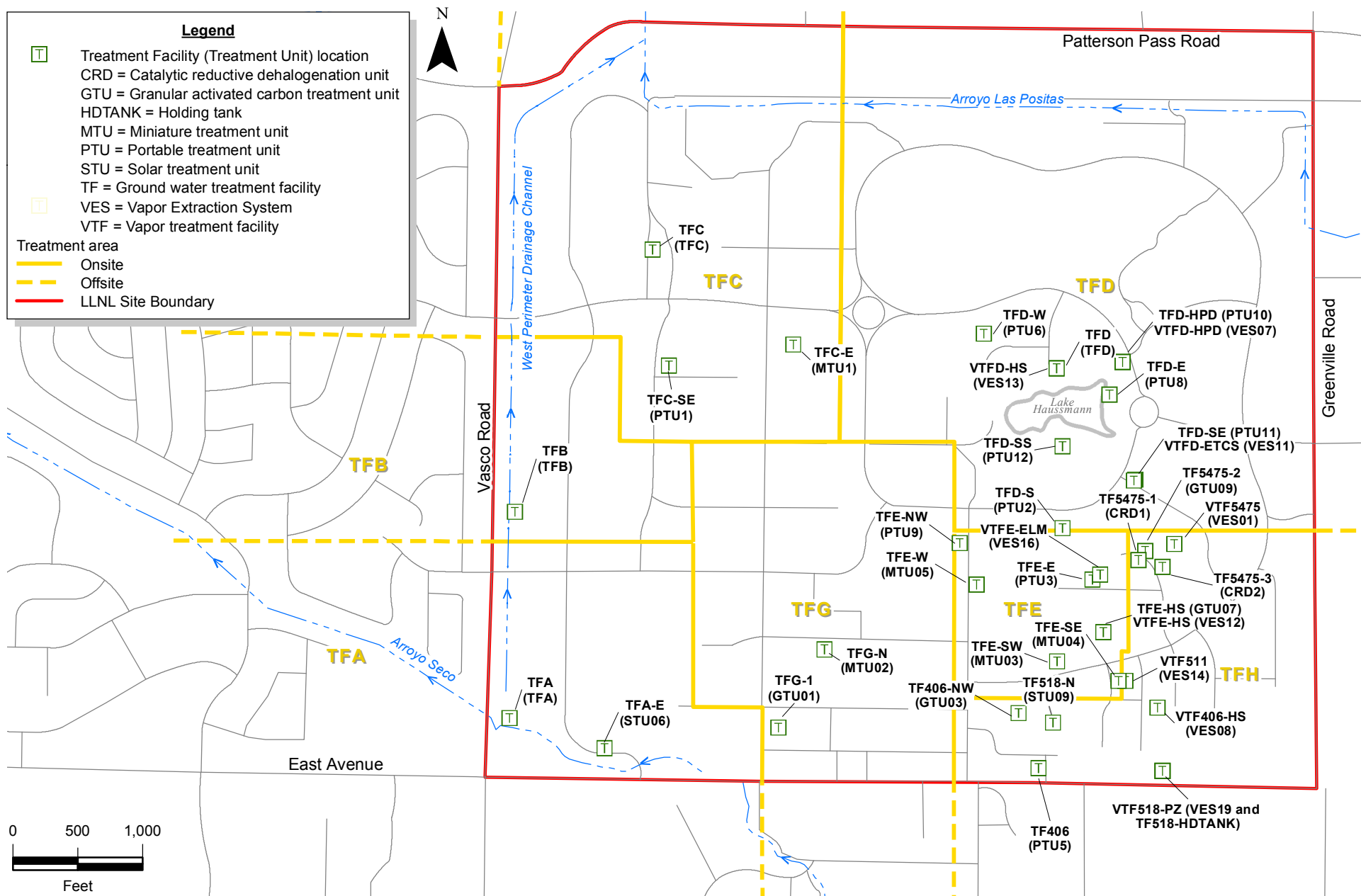


Figure 1. Livermore Site treatment areas and treatment facility locations.

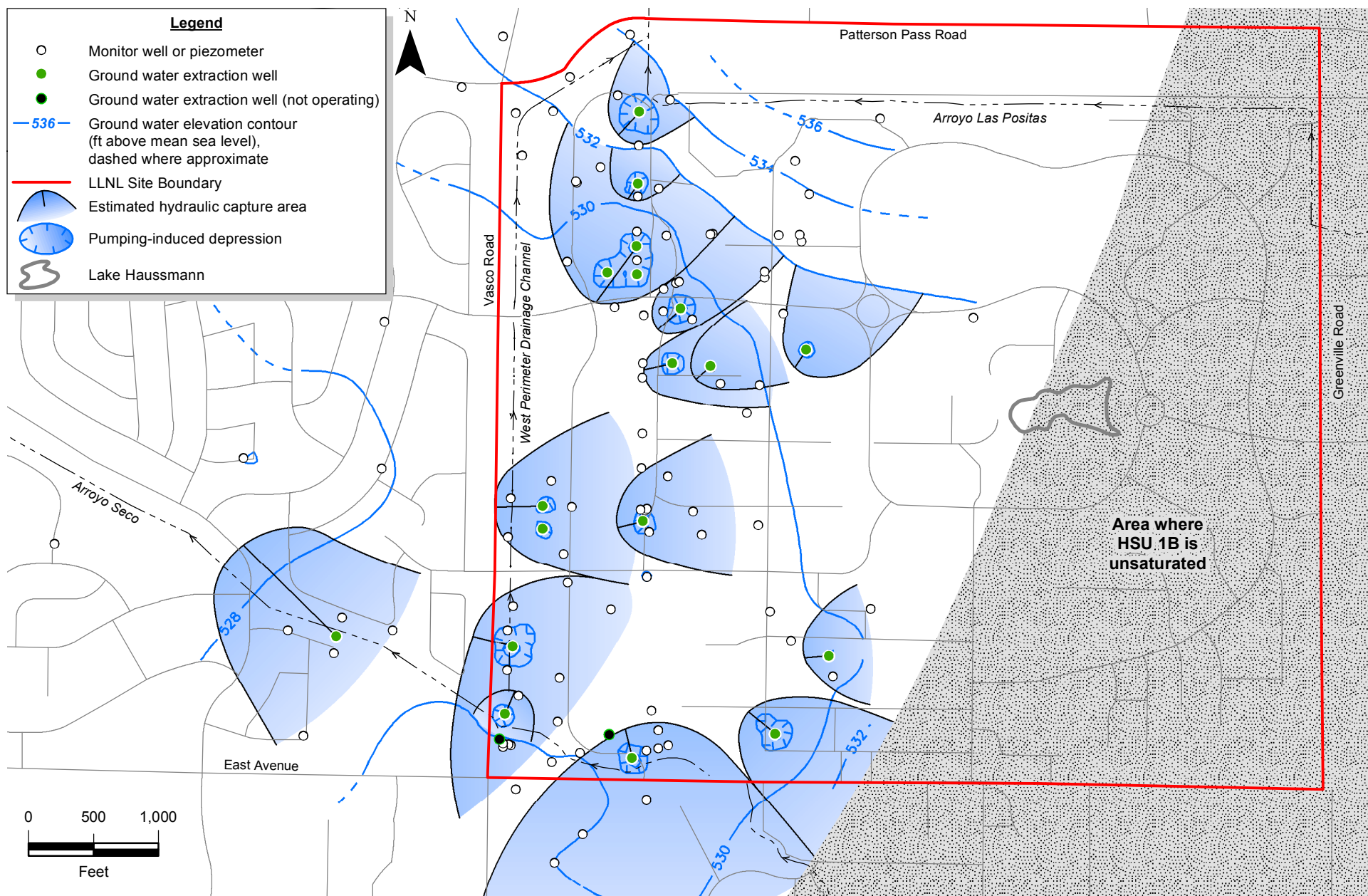


Figure 2. Ground water elevation contour map based on 118 wells completed within HSU-1B showing estimated hydraulic capture areas, LLNL and vicinity, first quarter 2013.

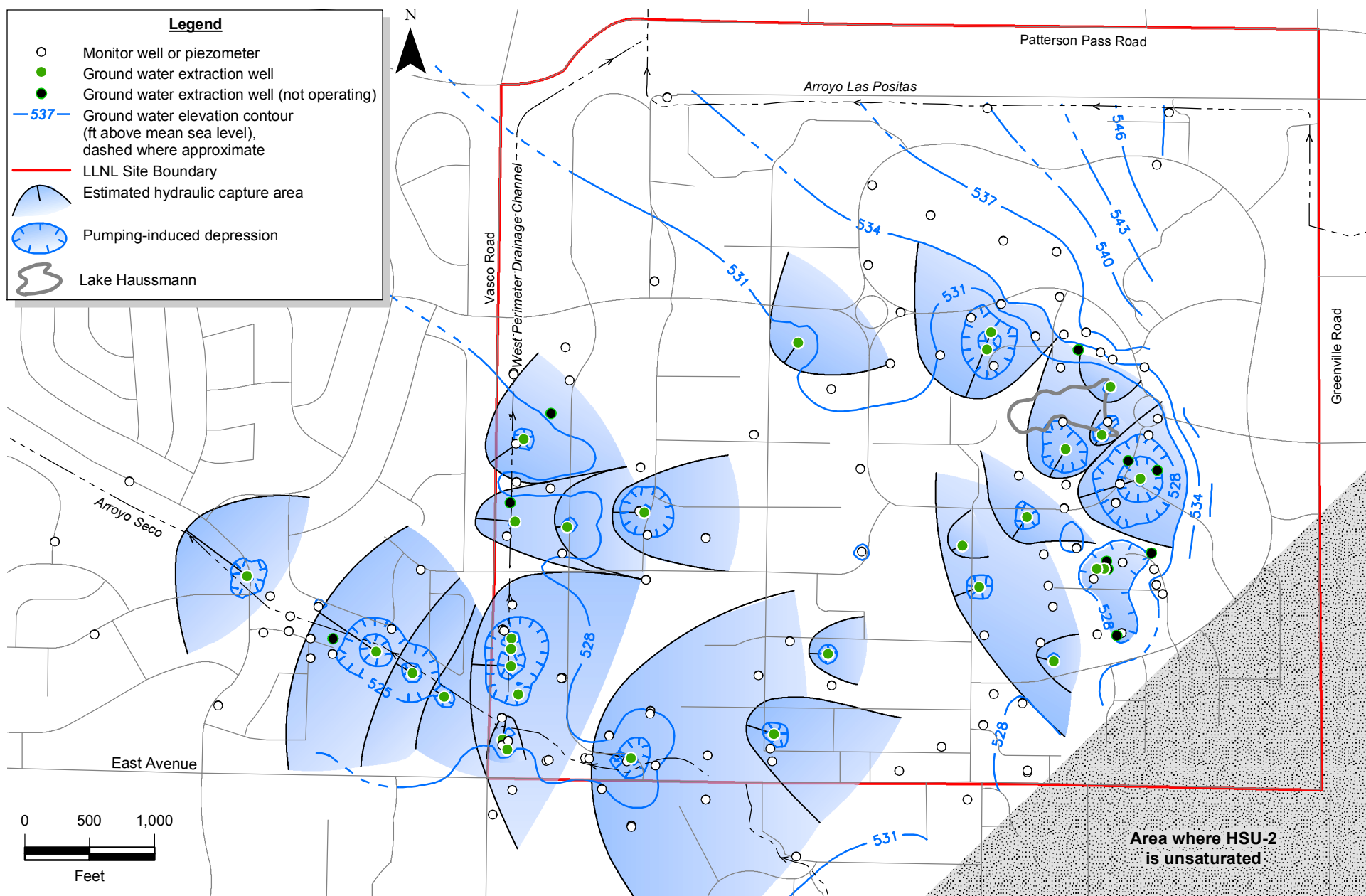


Figure 3. Ground water elevation contour map based on 166 wells completed within HSU-2 showing estimated hydraulic capture areas, LLNL and vicinity, first quarter 2013.

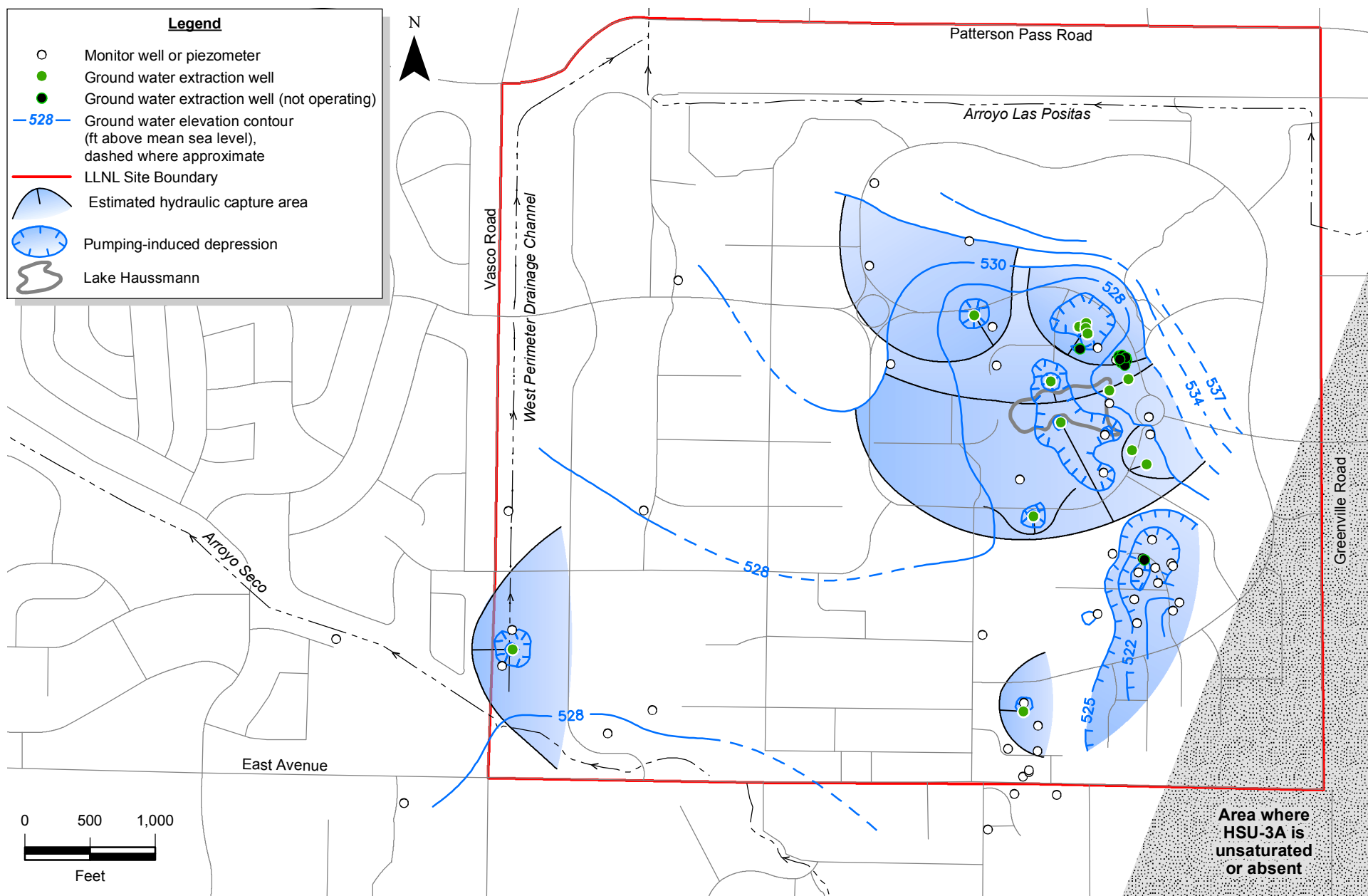


Figure 4. Ground water elevation contour map based on 71 wells completed within HSU-3A showing estimated hydraulic capture areas, LLNL and vicinity, first quarter 2013.

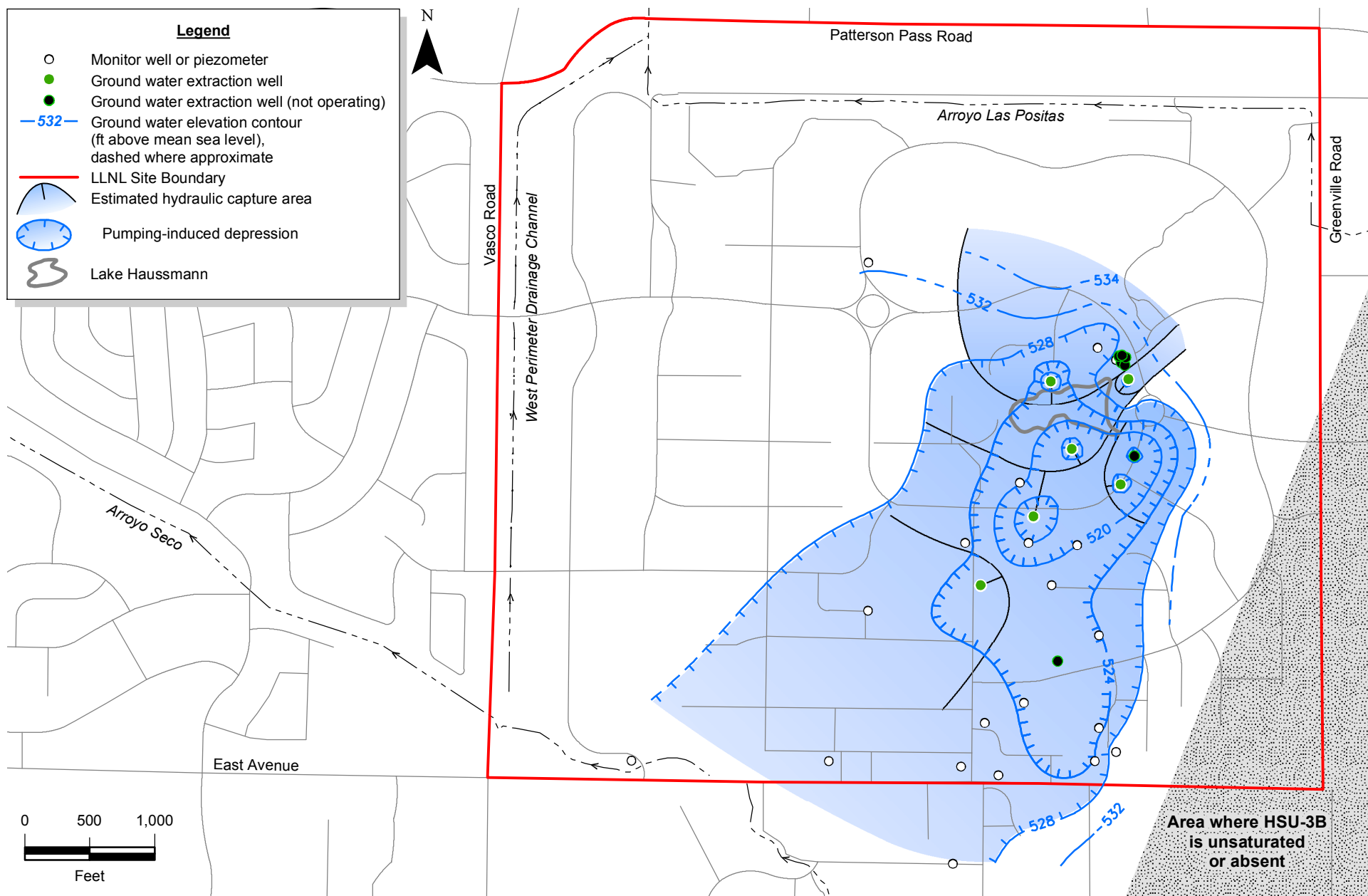


Figure 5. Ground water elevation contour map based on 34 wells completed within HSU-3B showing estimated hydraulic capture areas, LLNL and vicinity, first quarter 2013.

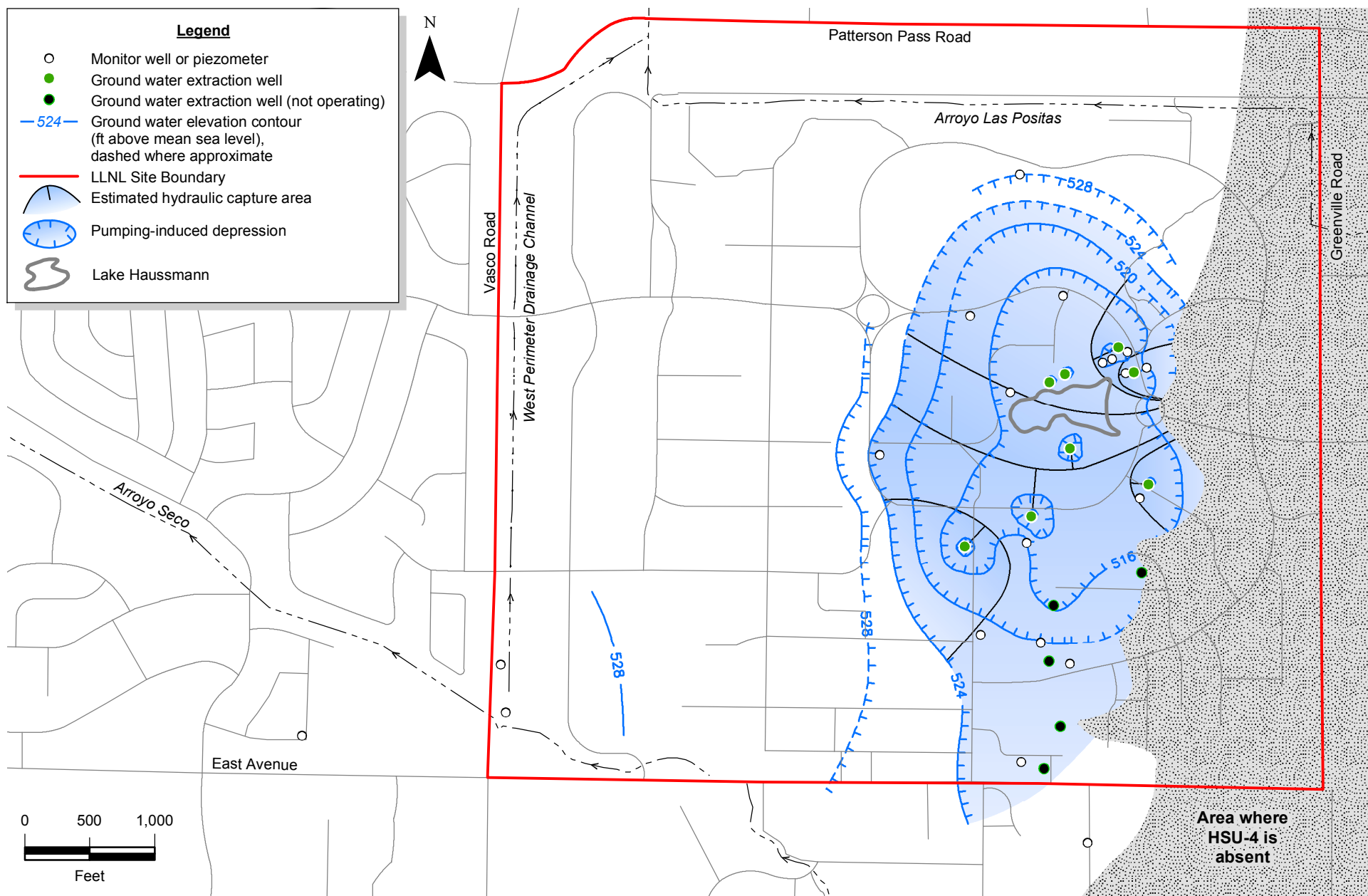


Figure 6. Ground water elevation contour map based on 33 wells completed within HSU-4 showing estimated hydraulic capture areas, LLNL and vicinity, first quarter 2013.

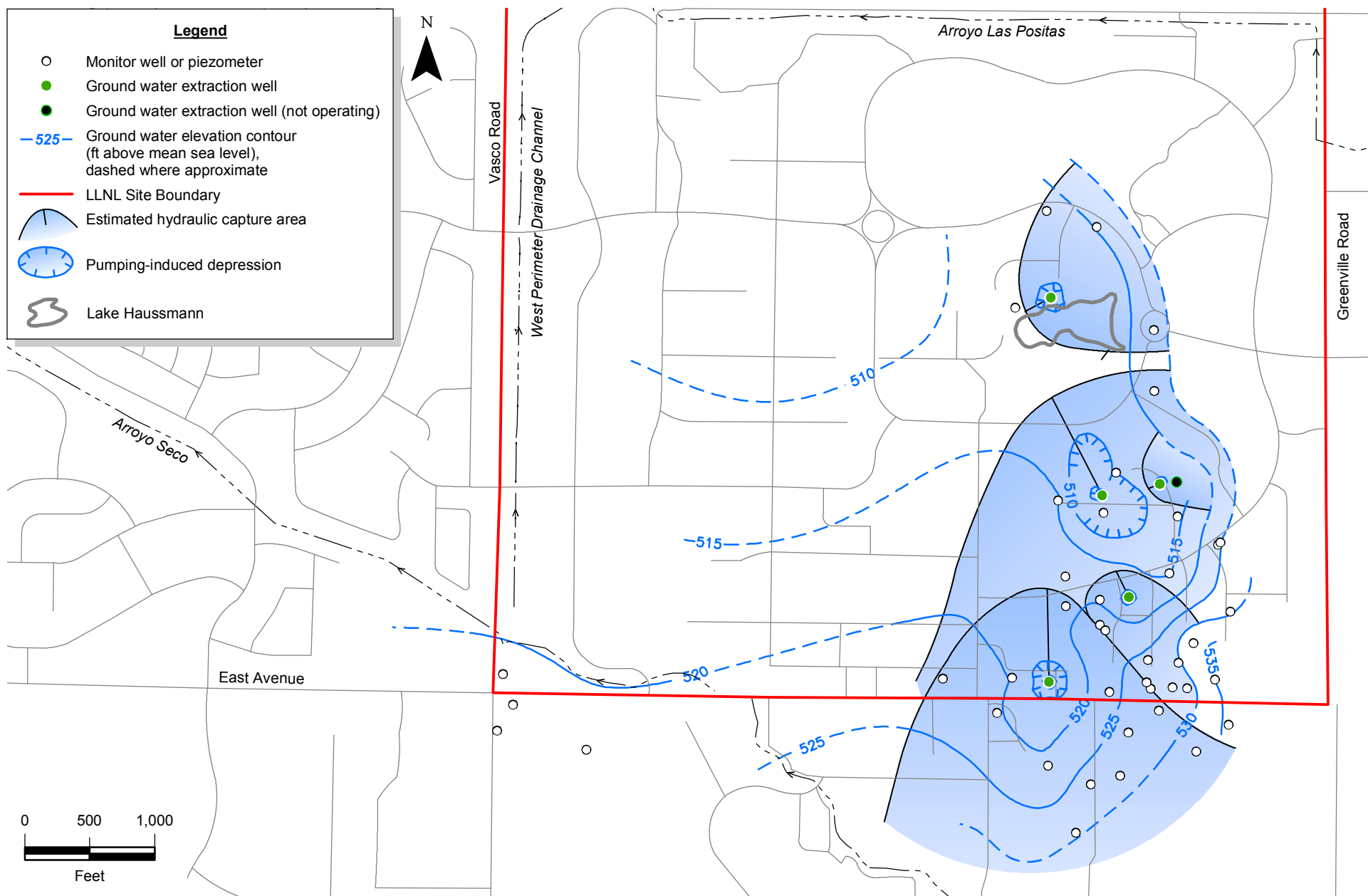


Figure 7. Ground water elevation contour map based on 48 wells completed within HSU-5 showing estimated hydraulic capture areas, LLNL and vicinity, first quarter 2013.